

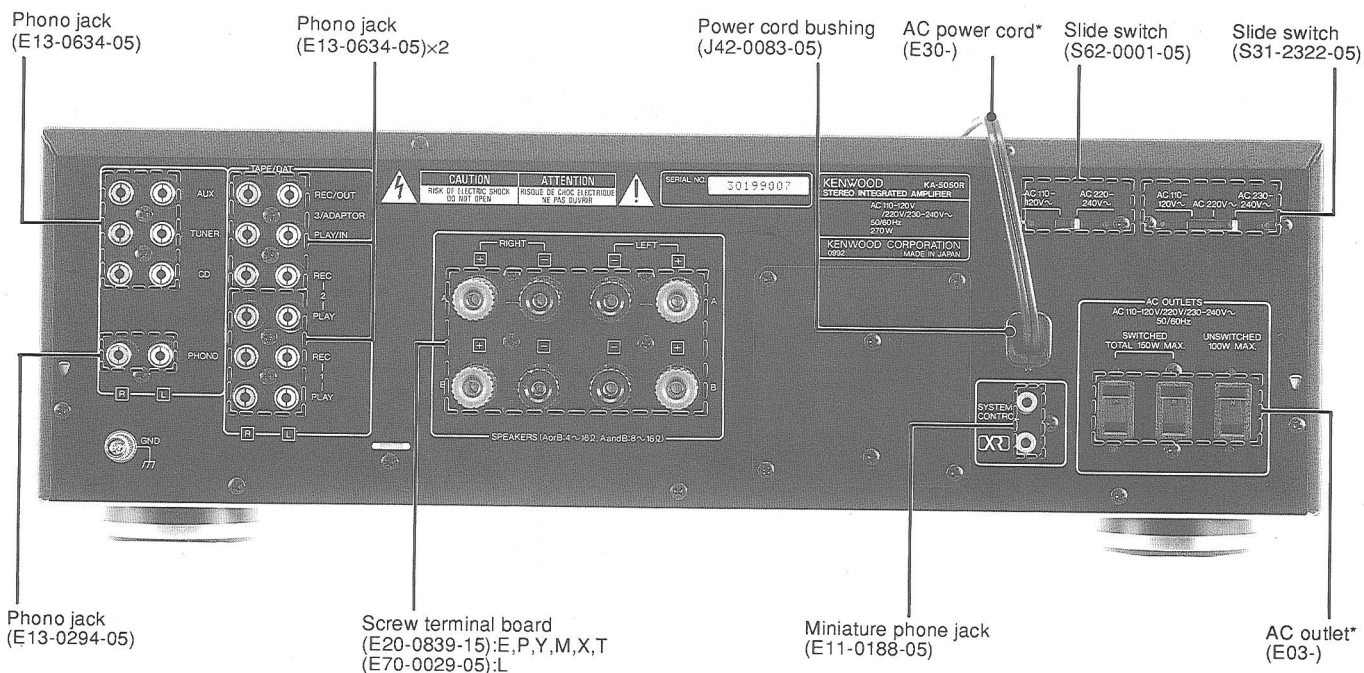
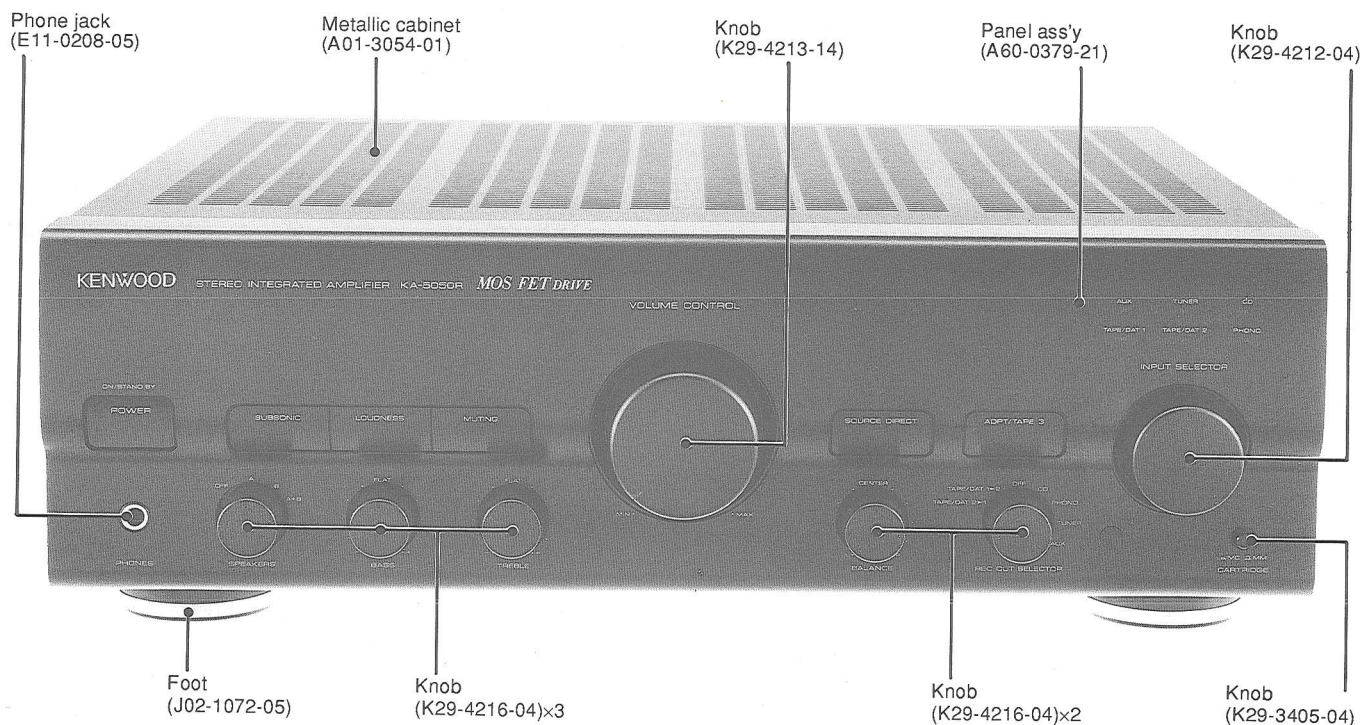
STEREO INTEGRATED AMPLIFIER

# KA-5050R

## SERVICE MANUAL

# KENWOOD

© 1993-3 PRINTED IN JAPAN  
B51-4708-00 (S) 2804



\* Refer to parts list on page 23.

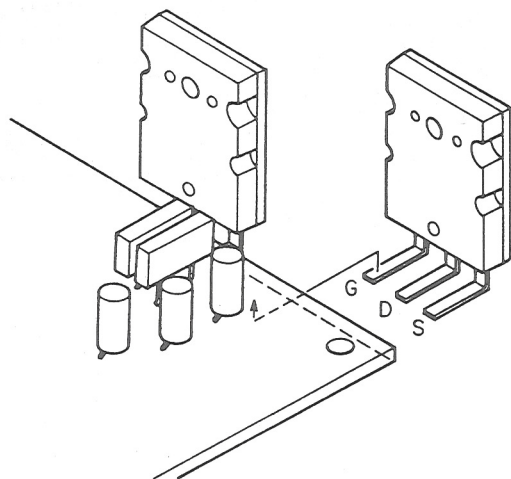
# KA-5050R

## CONTENTS

NOTES.....	2	PC BOARD.....	7
ACCESSORIES.....	2	SCHEMATIC DIAGRAM .....	13
REMOTE CONTROL OPERATION.....	3	EXPLODED VIEW.....	21
ADJUSTMENT/REGLAGES/ABGLEICH.....	4	PARTS LIST.....	23
WIRING DIAGRAM.....	5	SPECIFICATIONS .....	31

## NOTES

- Handle the power MOS-FETs carefully. They are easily destroyed by static electricity.
- When soldering, use a high-insulation soldering iron.
- When soldering, solder the gate (G) first.



- When replacing the power MOS-FET, there are differences according to the ranks, so please replace Pch (or Nch) as a pair of identical rank.
- The parts stock for parts of the same rank as Pch (or Nch) come in packs of pairs.

When ordering a quantity of 1, one pack (containing 2) will be delivered in one bag.

Please order as 2SK1529LBP4, 2SJ200LBP4.

There is no need to adjust the ranks of Pch and Nch, and there is no need to adjust the ranks of the left channel and right channel either.

- Since the KA-5050R is a FET amp, even with no signal, nearly as much heat is generated as for maximum output.

When piling sets on top of each other, put this amp at the top. Placing any other unit on top of this amp interferes with the heat release and can cause harm, so do not do this.

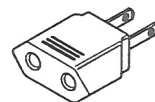
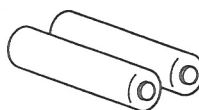
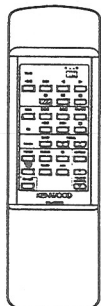
## ACCESSORIES

### INSTRUCTION MANUAL

B60-1131-00	ENGLISH	E, L, P
B60-1132-00	FRENCH	M
B60-1133-00	CHINESE	E, M
B60-1134-00	SPANISH	E, L
B60-1135-00	GE, DU, IT	

### Accessories

- Remote control unit .... 1  
(A70-0932-05)  
(A09-0146-08): Battery cover
- Batteries (R6/SUM-3/AA\*) ..... 2
- AC plug adaptor ..... 1  
(Except for some areas)  
For the unit with a European AC plug in areas other than Europe.  
(E03-0115-05)





## REMOTE CONTROL OPERATION

Operation keys for KENWOOD components connected by system control cords

### Cassette deck operation keys

These keys perform the same operations as the corresponding keys on the cassette deck. However, operations requiring simultaneous pressing of two keys are not possible.

### CD player operation keys

\* The DISC key is only used for the Autochanger CD player.

### INPUT SELECTOR keys

### POWER key

### TAPE A/B selector

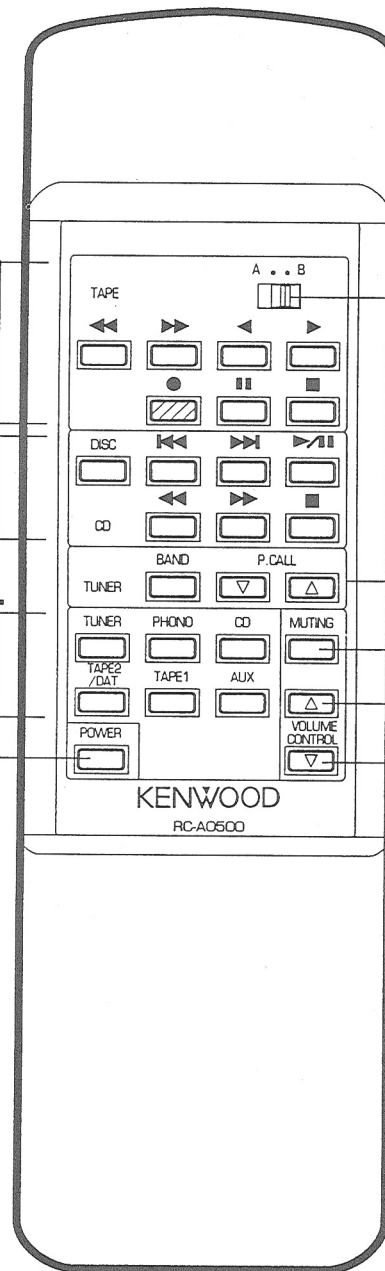
**A** : When operating Deck A of a double cassette deck, set this selector to the A position.

**B** : When operating Deck B of a double cassette deck or single cassette deck, set this selector to the B position.

### TUNER operation keys

### MUTING key

### VOLUME UP ( $\Delta$ ), DOWN ( $\nabla$ ) keys



### KA-5050R operation keys

These keys have the same function as the corresponding keys on the main unit.

A70-0932-05  
A09-0146-08: Battery cover

# KA-5050R

## ADJUSTMENT/REGLAGE/ABGLEICH

### ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	AMPLIFIER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
Unless otherwise specified, set the respective switches as follows: POWER: ON      SPEAKER: B      REC OUT: OFF      SELECTOR: PHONO							
1	IDLE CURRENT	—	Connect a DC voltmeter across CN3 Pin 1-2 CN3 Pin 3-4 CN4 Pin 1-2 CN4 Pin 3-4	VOLUME: 0	VR1,3 (L) VR2,4 (R)	10 mV	(a)

### REGLAGES

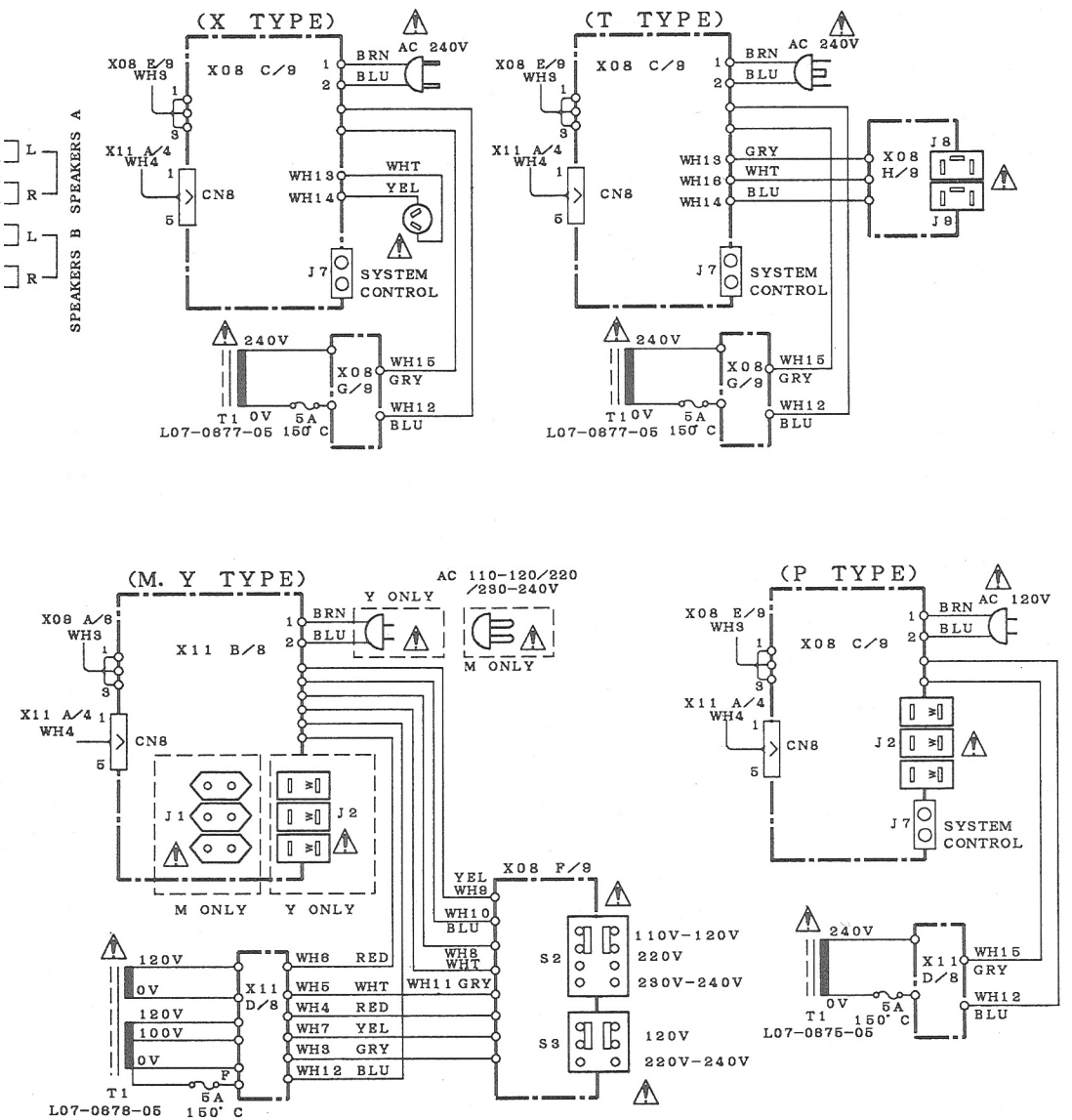
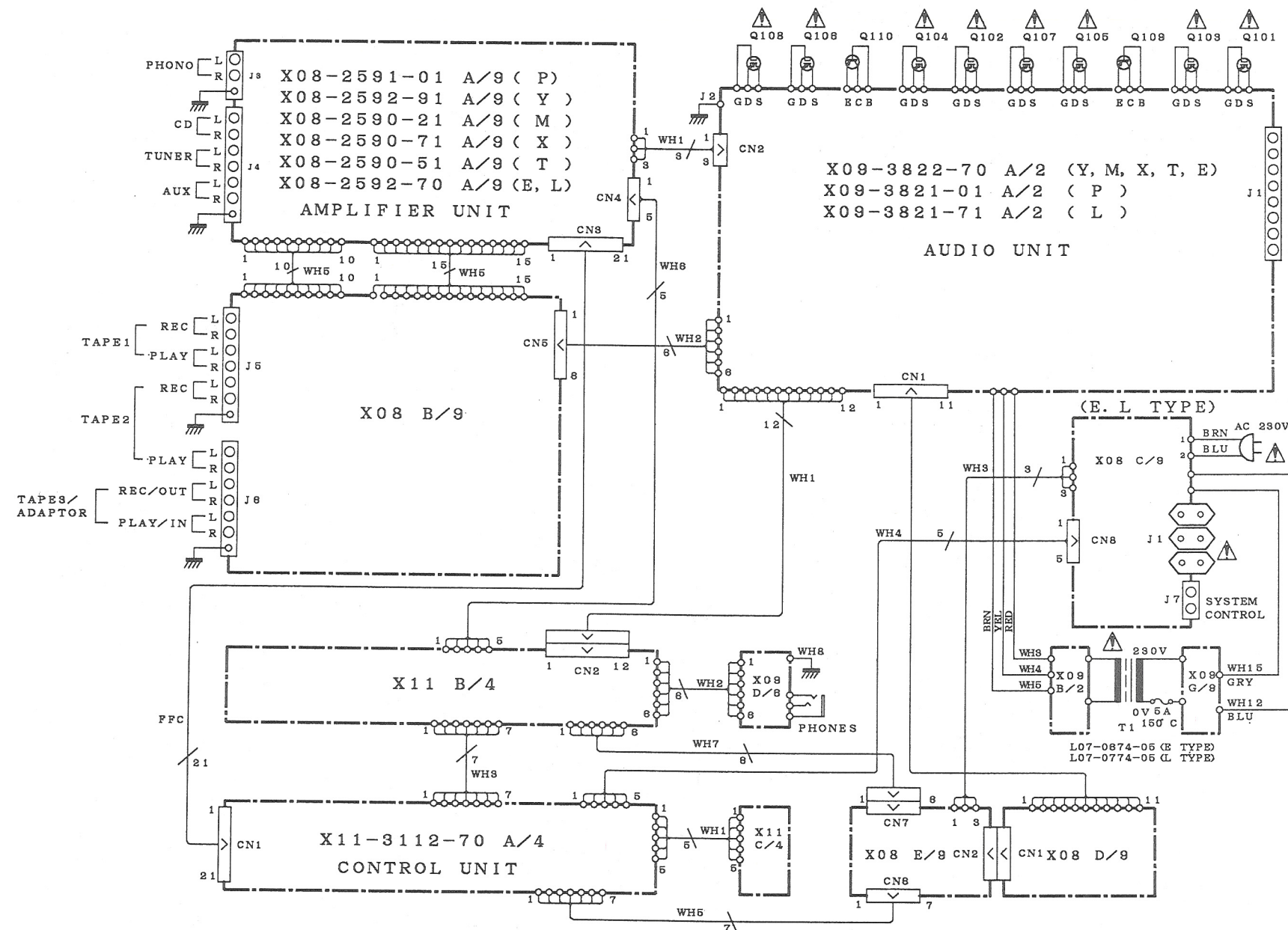
N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DE L'AMPLIFICATEUR	POINT DE L'ALIGNEMENT	ALIGNER POUR	FIG.
Sauf indication contraire, régler comme suit les commandes respectives POWER: ON      SPEAKER: B      REC OUT: OFF      SELECTOR: PHONO							
1	COURANT DE PLARISATION	—	Connecter un voltmètre de CC SUR CN3 Pin 1-2 CN3 Pin 3-4 CN4 Pin 1-2 CN4 Pin 3-4	VOLUME: 0	VR1,3 (G) VR2,4 (D)	10 mV	(a)

### ABGLEICH

NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	VORSTÄRKER-EINSTELLUNG	ABGLEICH-PUNKTE	ABGLEICHEN FÜR	ABB.
Wenn nicht anders angegeben, die einzelnen Schalter wie folgt einstellen: POWER: ON      SPEAKER: B      REC OUT: OFF      SELECTOR: PHONO							
1	LEERLAUFSTROM	—	Einen Gleichspannungs- messer Über CN3 Pin 1-2 CN3 Pin 3-4 CN4 Pin 1-2 CN4 Pin 3-4 anschießen.	VOLUME: 0	VR1, 3(L) VR2, 4(R)	10 mV	(a)



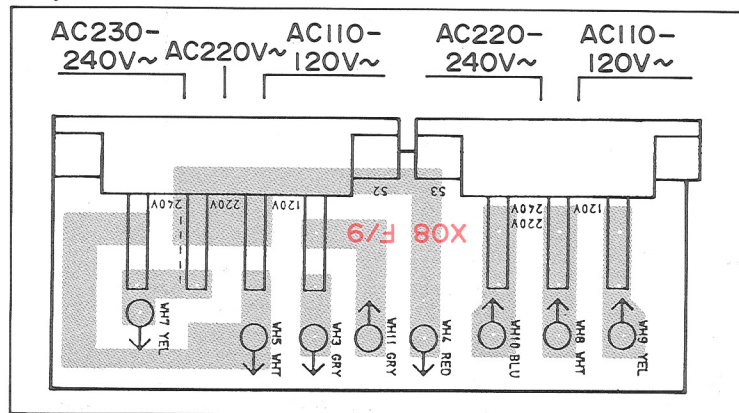
KA-5050R KA-5050R





# PC BOARD (Component side view)

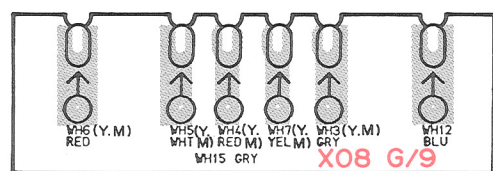
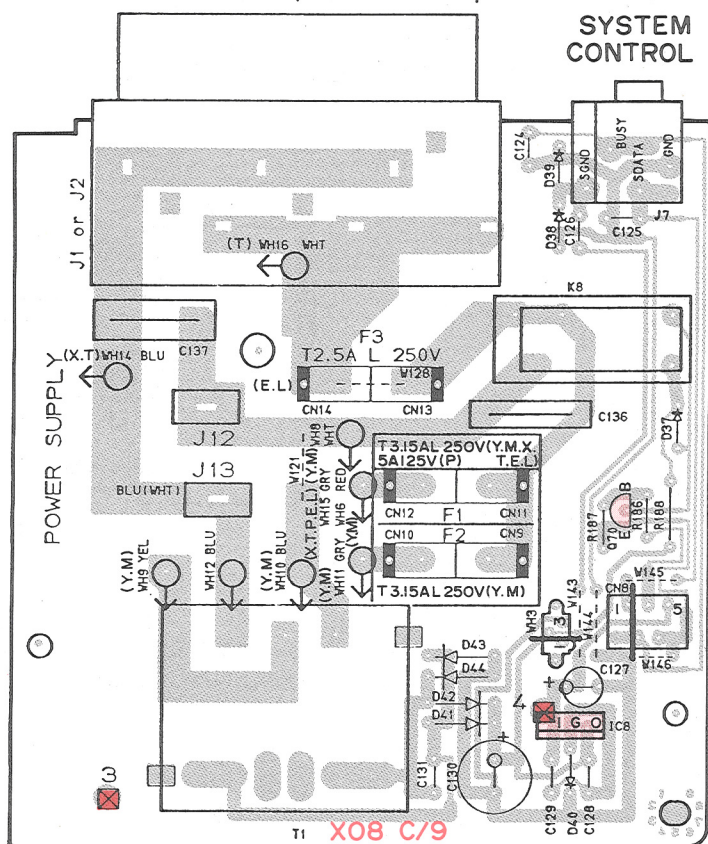
Y, M TYPE



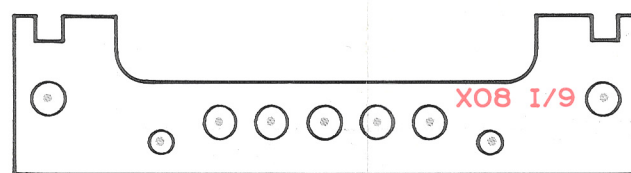
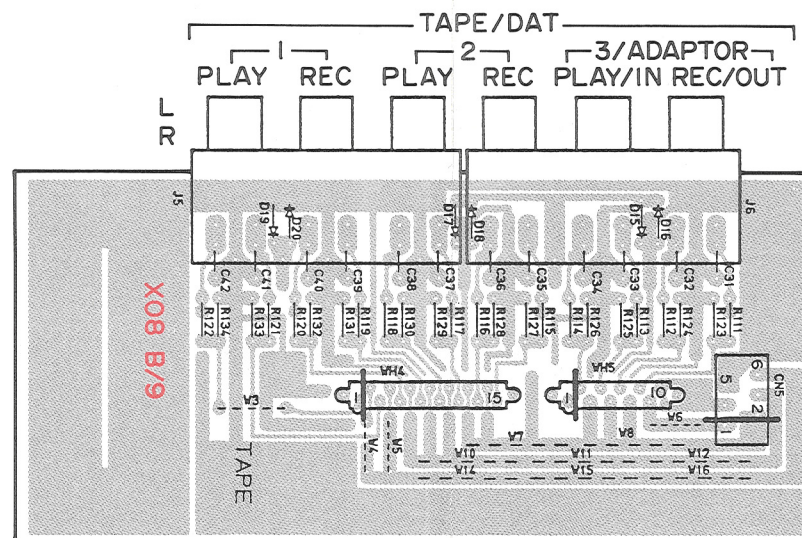
AC OUTLETS  
AC110-120V/220V/230-240V~  
50/60Hz  
UNSWITCHED 100W MAX. SWITCHED TOTAL 150W MAX.

P, Y, M, E, L TYPE

SYSTEM CONTROL

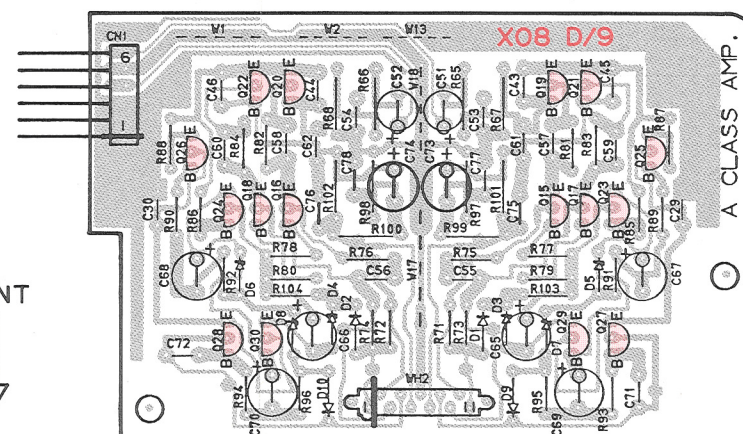
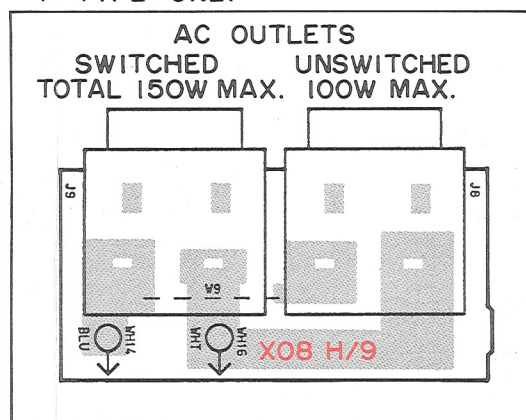


## PREAMPLIFIER UNIT (X08-259X-XX)

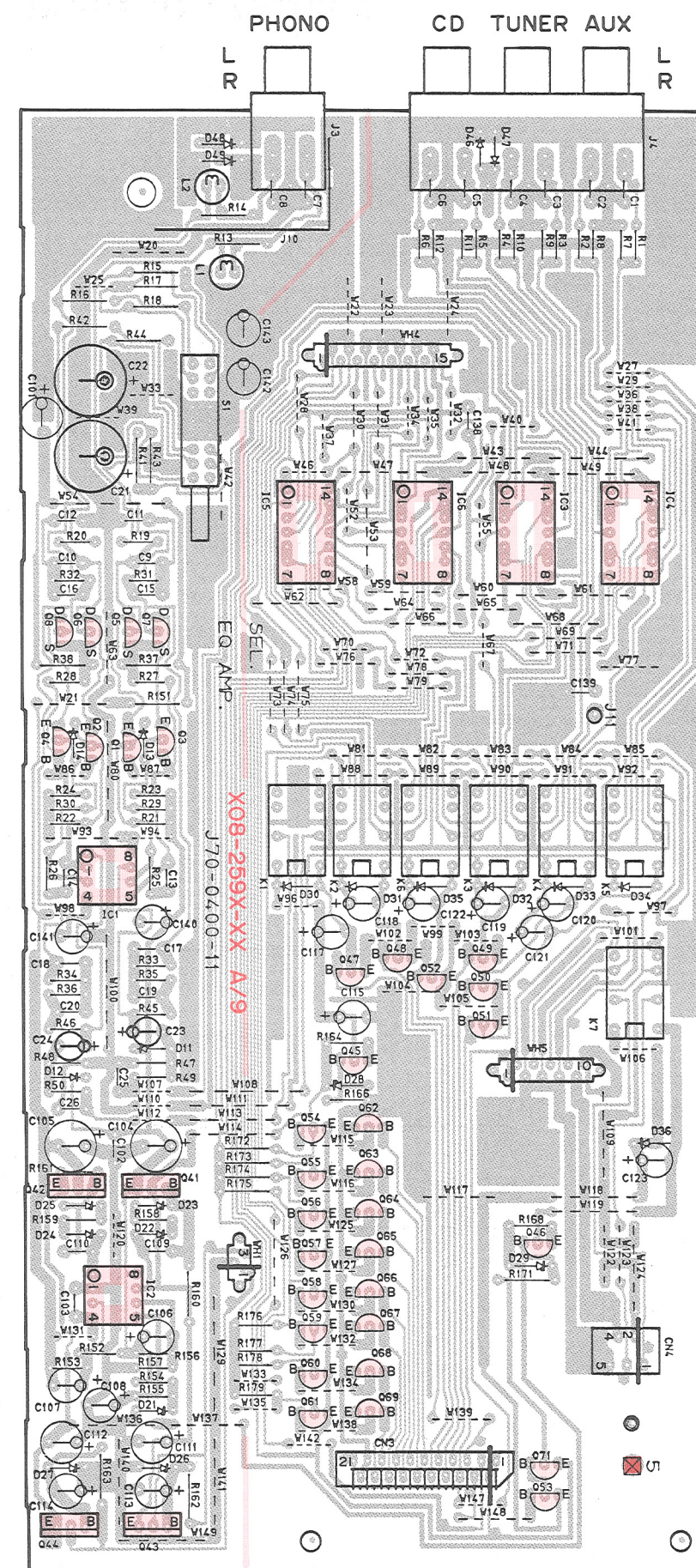
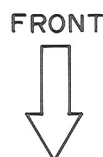


T TYPE ONLY

AC OUTLETS  
SWITCHED TOTAL 150W MAX. UNSWITCHED 100W MAX.



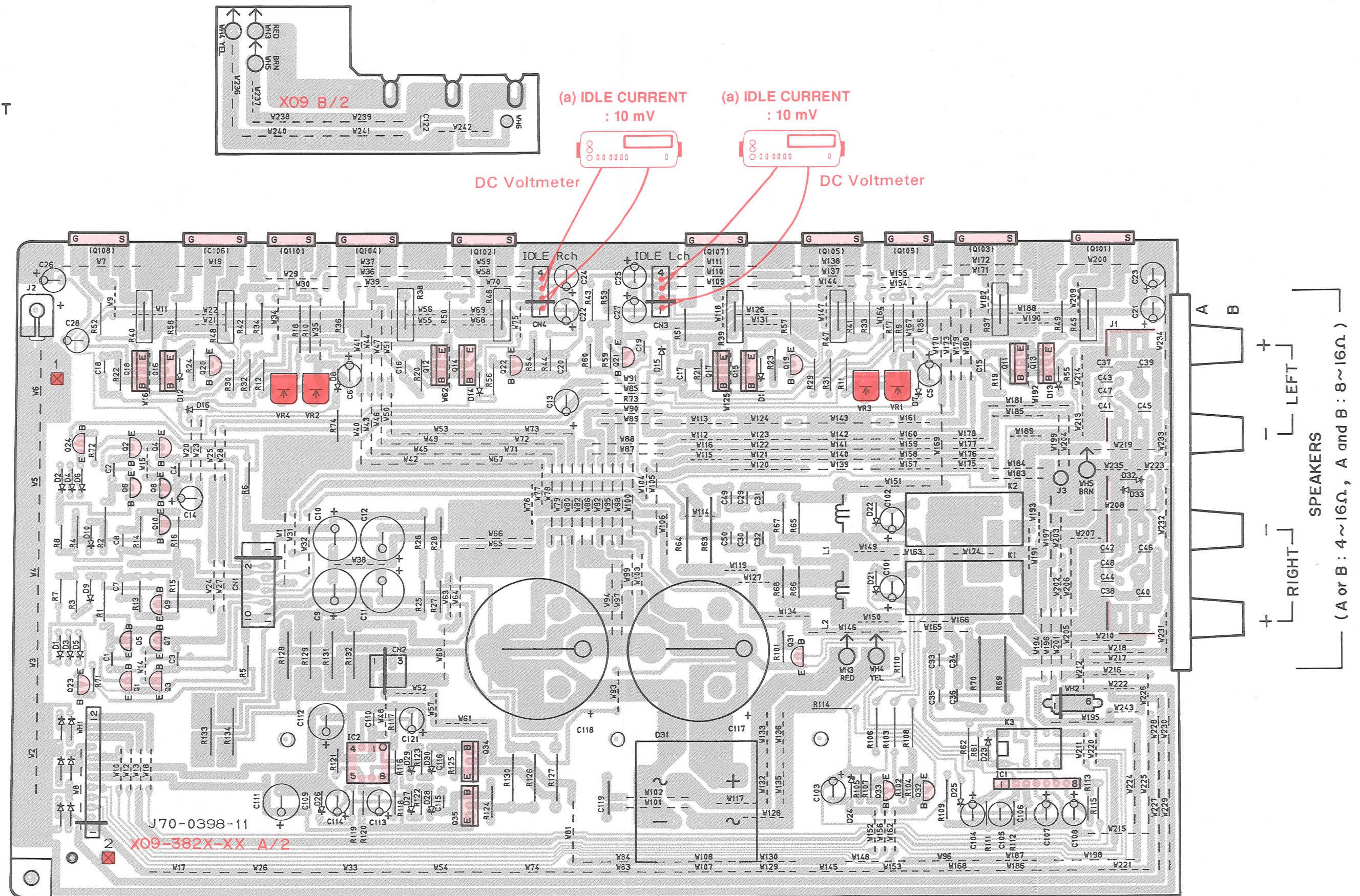
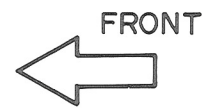
VOLUME CONTROL





# PC BOARD (Component side view)

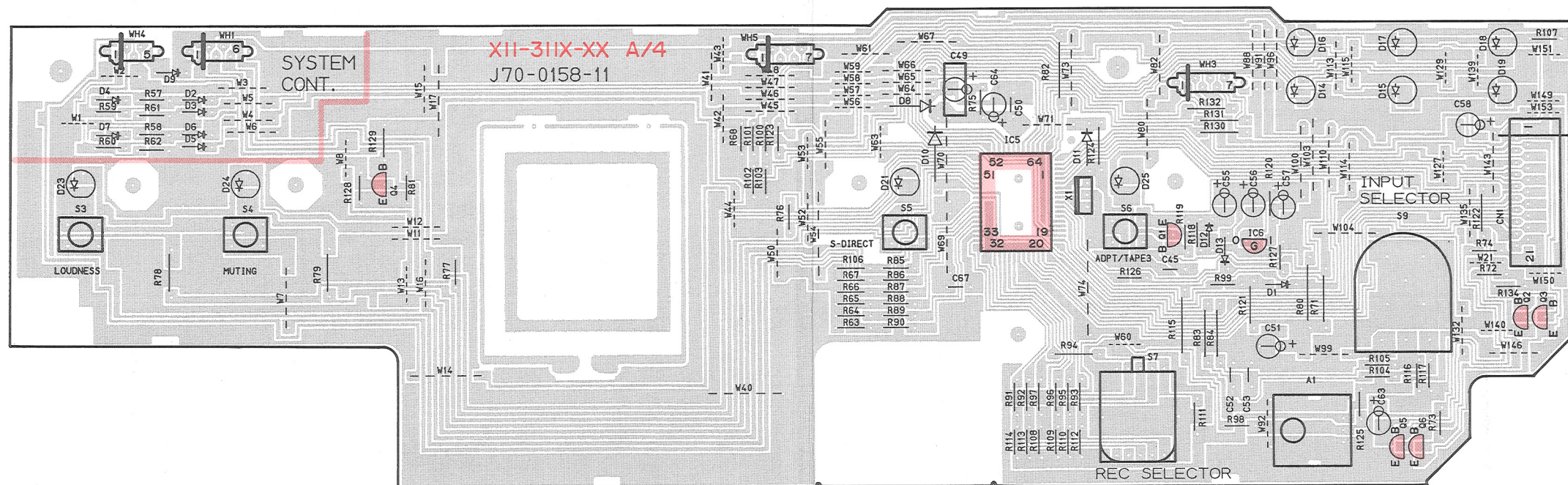
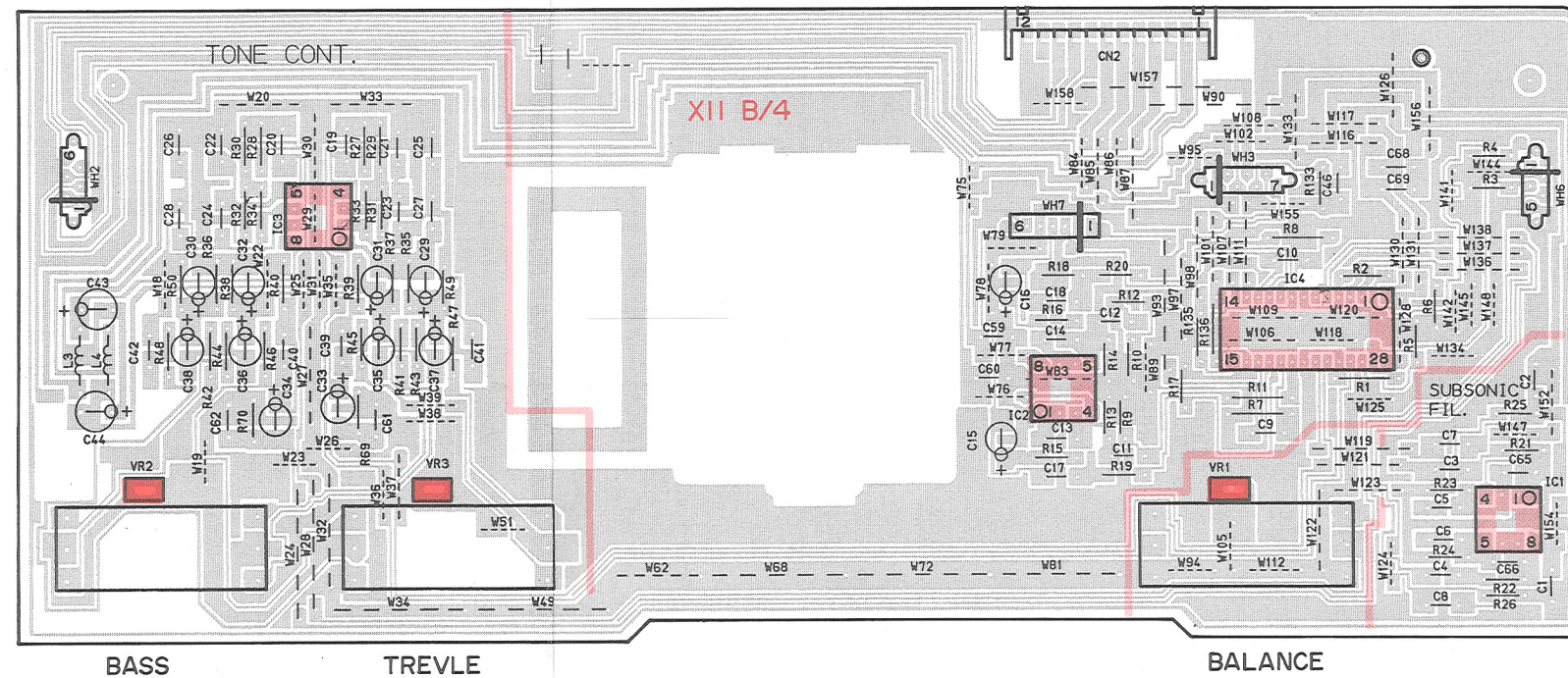
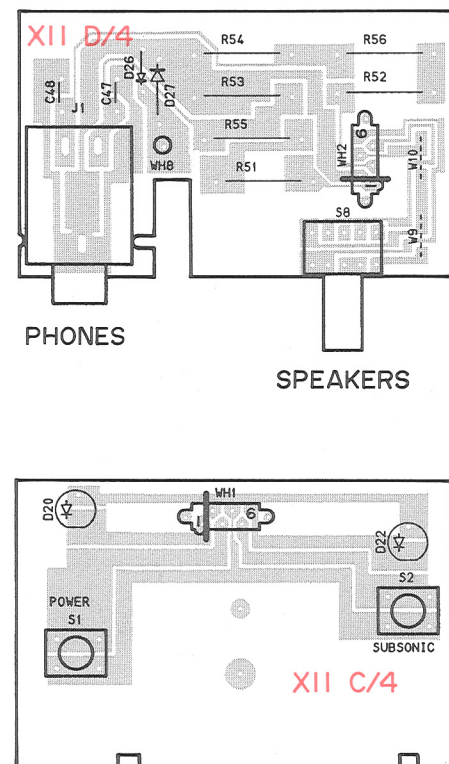
AUDIO UNIT (X09-382X-XX)



Refer to the schematic diagram for the values of resistors and capacitors.

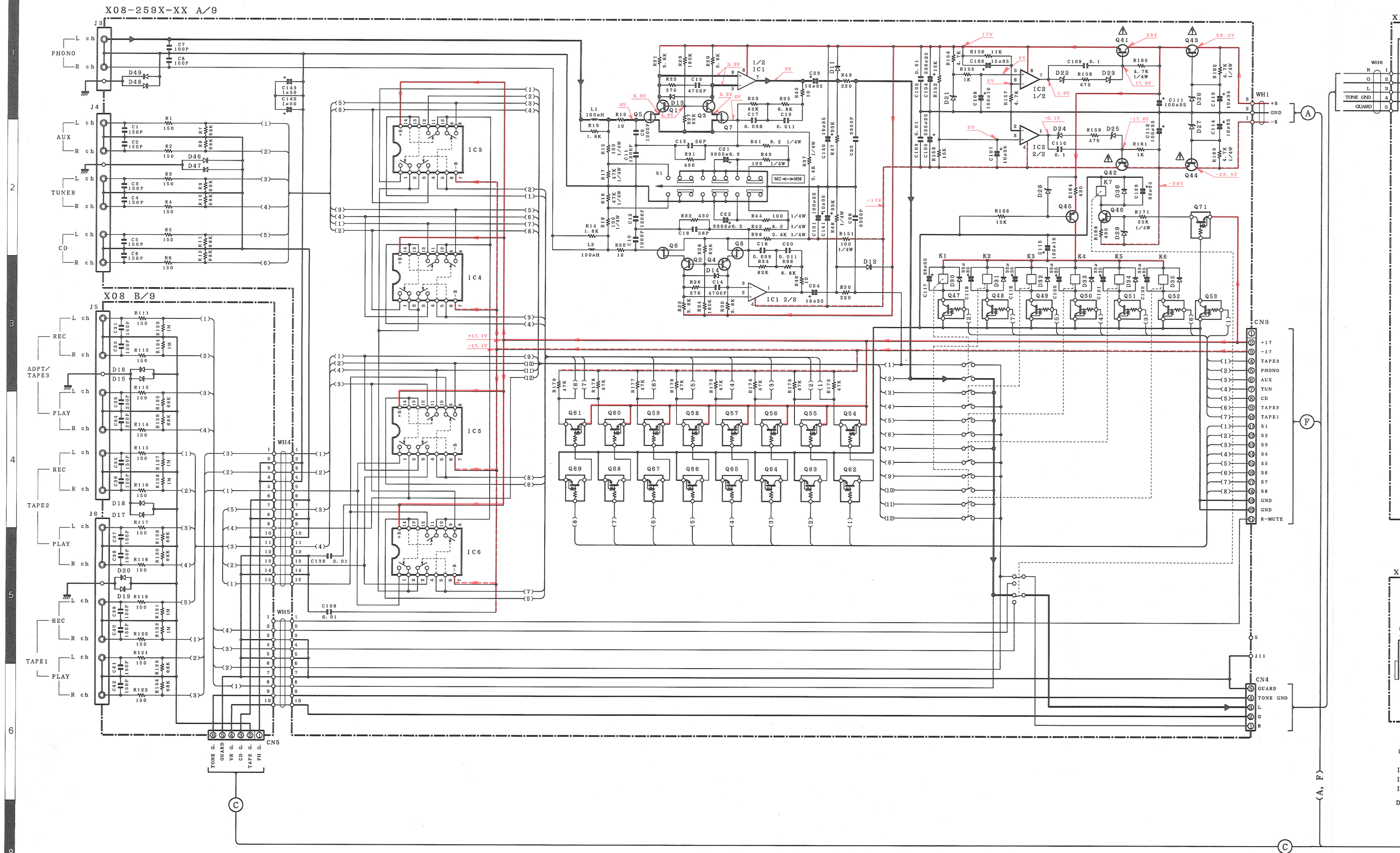


**CONTROL UNIT (X11-3112-70)**

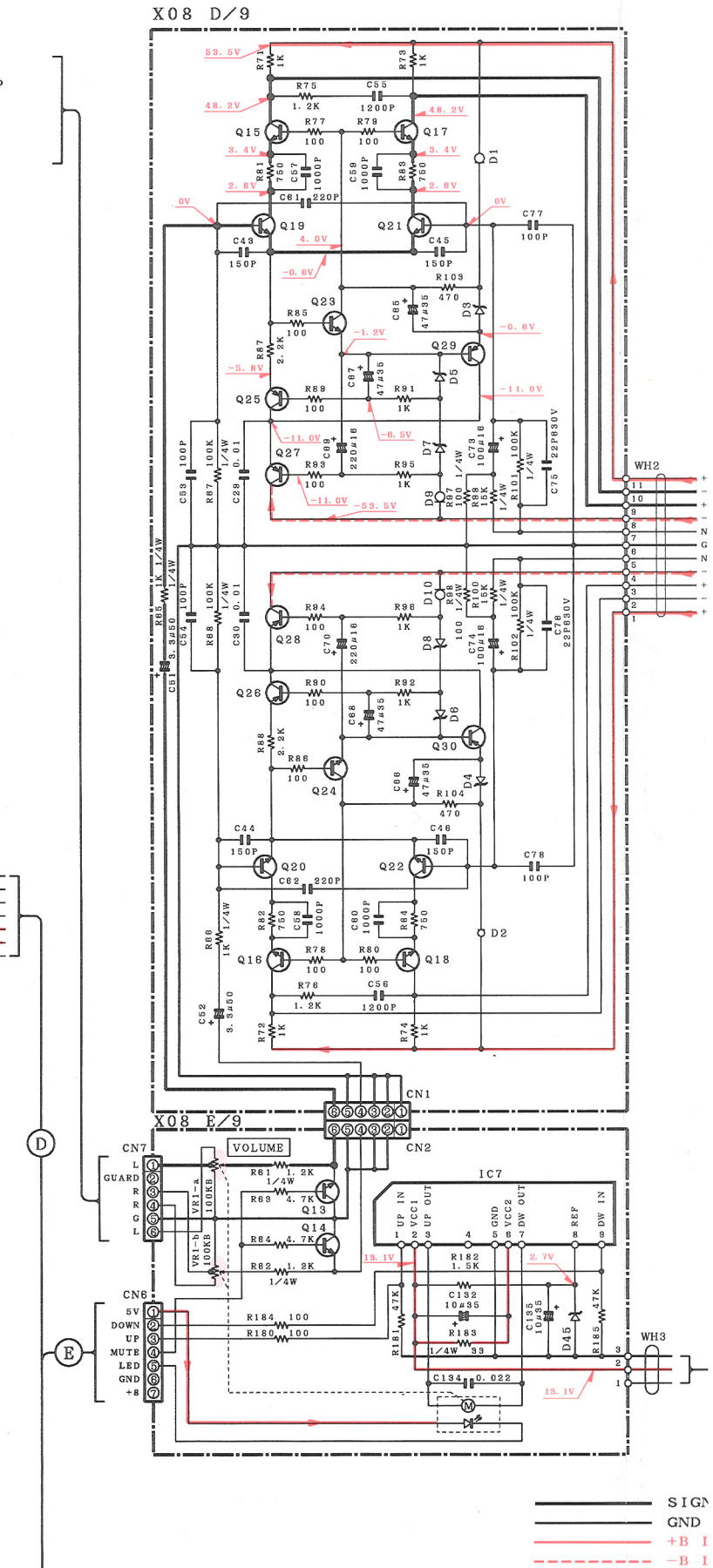
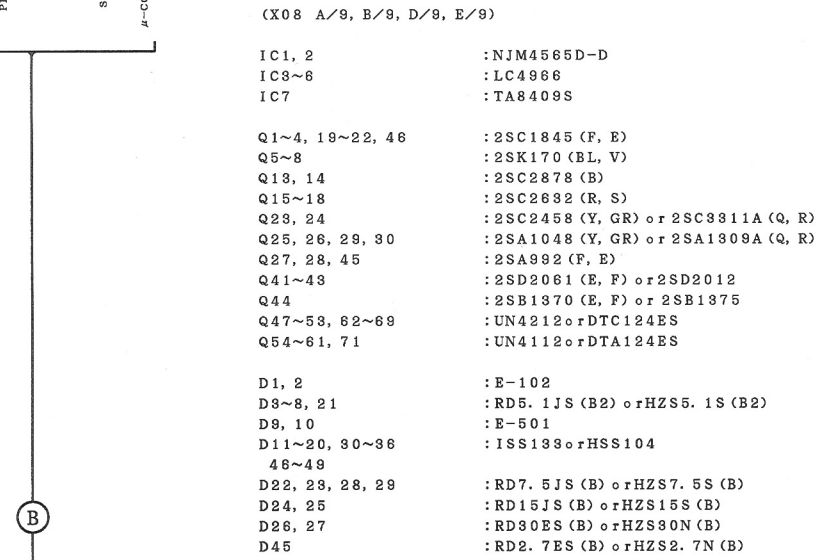
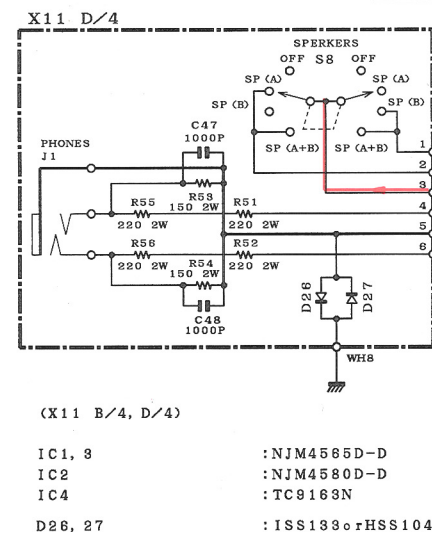
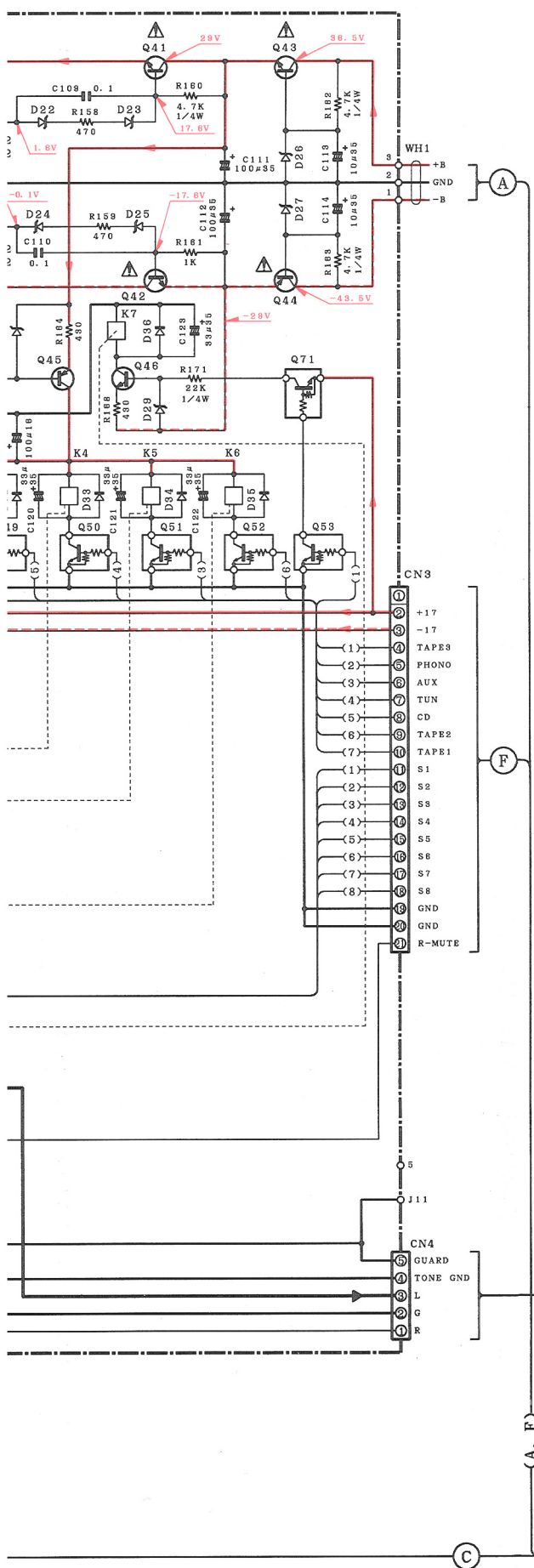


Refer to the schematic diagram for the values of resistors and capacitors.



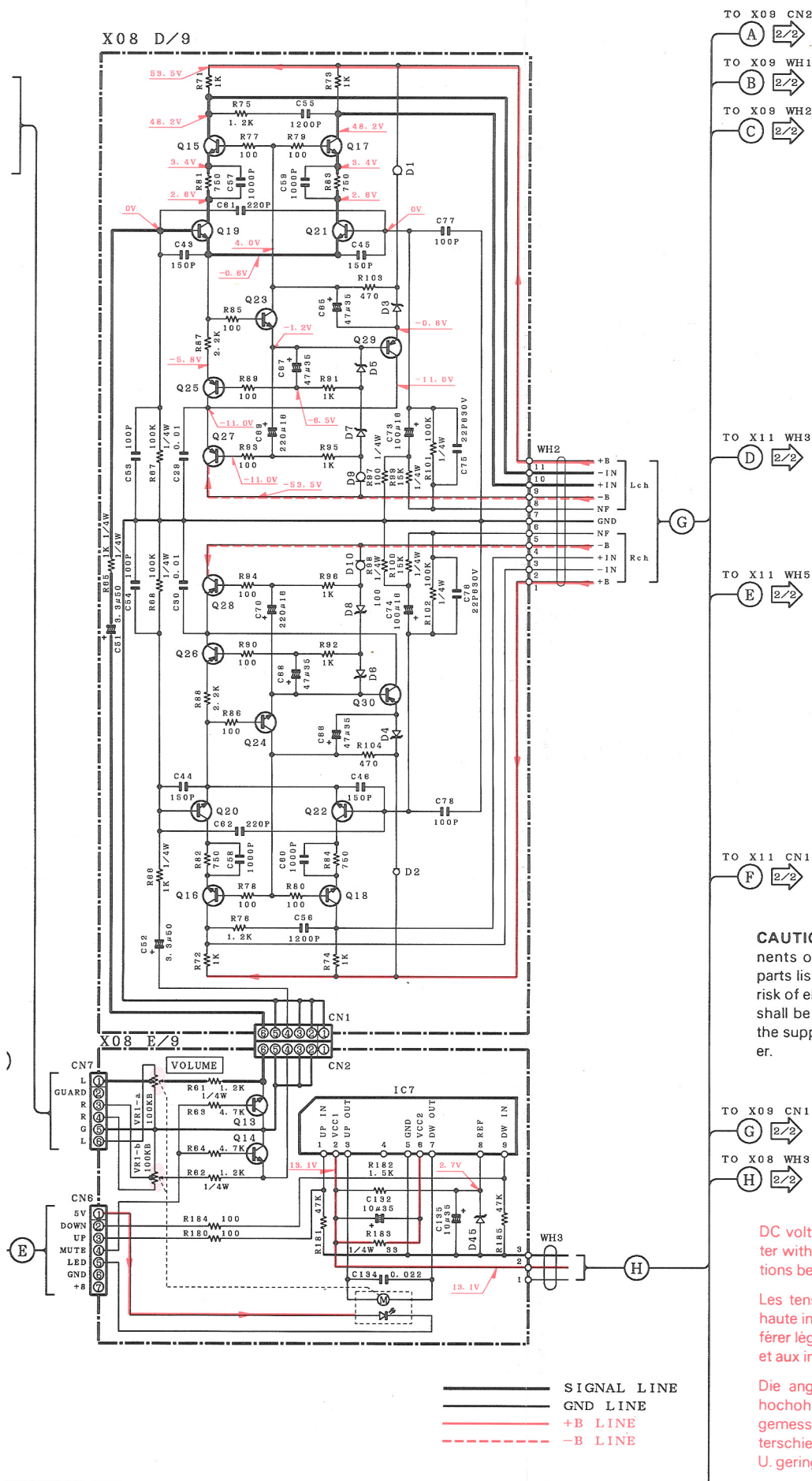








X08 D/9



TO X09 CN2

TO X09 WH1

TO X09 WH2

TO X09 WH3

TO X09 WH4

TO X09 WH5

TO X09 WH6

TO X09 WH7

TO X09 WH8

TO X09 WH9

TO X09 WH10

TO X09 WH11

TO X09 WH12

TO X09 WH13

TO X09 WH14

TO X09 WH15

TO X09 WH16

TO X09 WH17

TO X09 WH18

TO X09 WH19

TO X09 WH20

TO X09 WH21

TO X09 WH22

TO X09 WH23

TO X09 WH24

TO X09 WH25

TO X09 WH26

TO X09 WH27

TO X09 WH28

TO X09 WH29

TO X09 WH30

TO X09 WH31

TO X09 WH32

TO X09 WH33

TO X09 WH34

TO X09 WH35

TO X09 WH36

TO X09 WH37

TO X09 WH38

TO X09 WH39

TO X09 WH40

TO X09 WH41

TO X09 WH42

TO X09 WH43

TO X09 WH44

TO X09 WH45

TO X09 WH46

TO X09 WH47

TO X09 WH48

TO X09 WH49

TO X09 WH50

TO X09 WH51

TO X09 WH52

TO X09 WH53

TO X09 WH54

TO X09 WH55

TO X09 WH56

TO X09 WH57

TO X09 WH58

TO X09 WH59

TO X09 WH60

TO X09 WH61

TO X09 WH62

TO X09 WH63

TO X09 WH64

TO X09 WH65

**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

TO X09 CN1

TO X08 WH3

TO X08 WH4

TO X08 WH5

TO X08 WH6

TO X08 WH7

TO X08 WH8

TO X08 WH9

TO X08 WH10

TO X08 WH11

TO X08 WH12

TO X08 WH13

TO X08 WH14

TO X08 WH15

TO X08 WH16

TO X08 WH17

TO X08 WH18

TO X08 WH19

TO X08 WH20

TO X08 WH21

TO X08 WH22

TO X08 WH23

TO X08 WH24

TO X08 WH25

DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

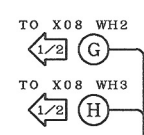
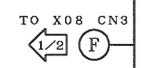
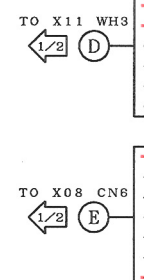
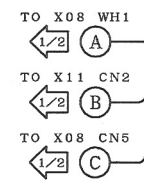
1/2

Y08-4812-70

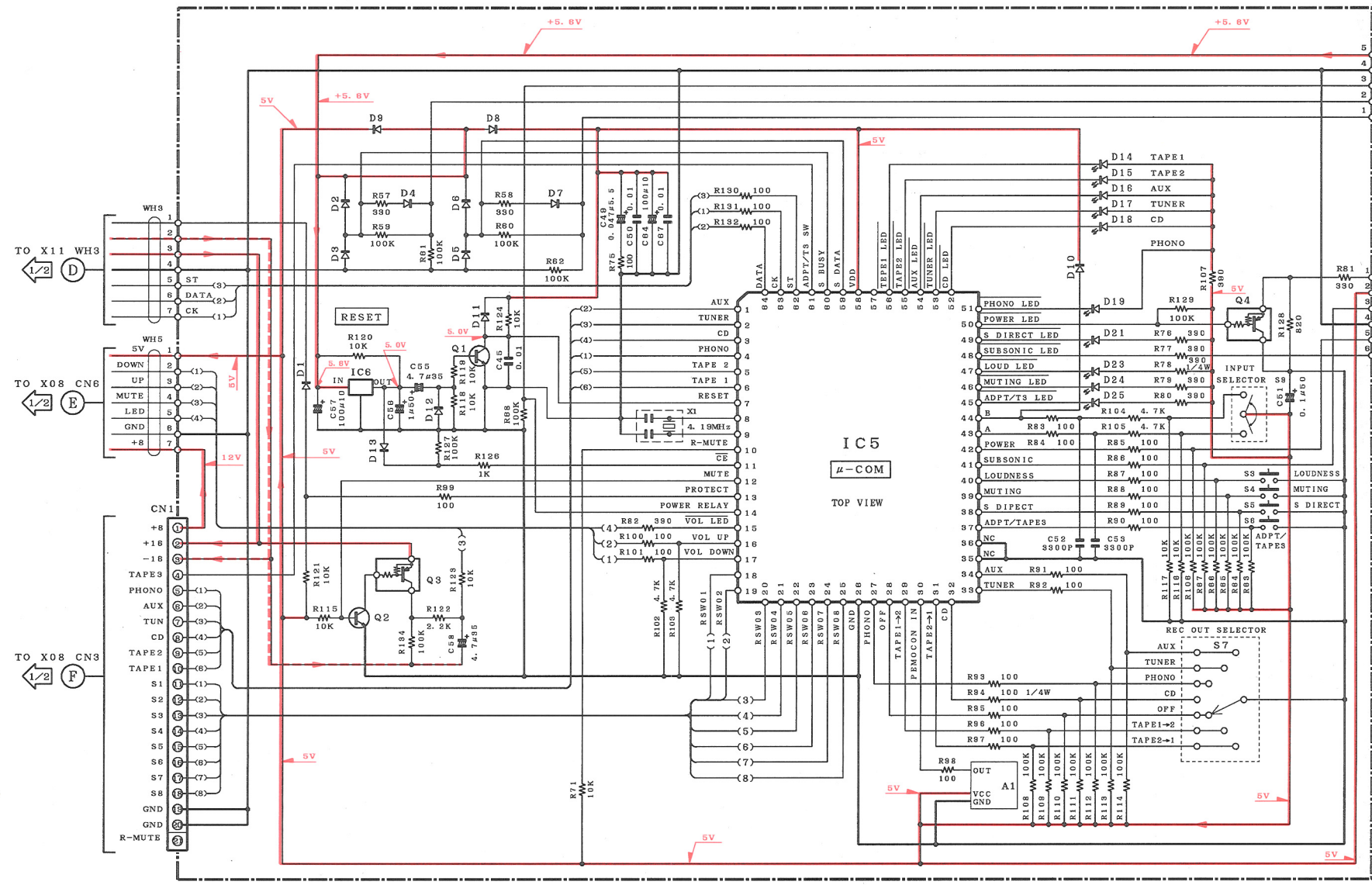
# KA-5050R

## KENWOOD





X11-3112-70 A/4



X11-3112-70 A/4, C/4

IC5 : μPD75104GF-778  
IC6 : PST529D

Q1, 2 : 2SC1740S (Q, R) or 2SC3311A (Q, R)  
Q3, 4 : DTA124ES or UN4112

D1 : 1SS131 or HSS104A  
D2~13 : 1SS133 or HSS104  
D14~19 : B30-1291-05  
D20 : B30-1290-05

X08-259X-XX C/9

IC8 : TA7805S or UPC7805HF  
Q70 : 2SC2458 (Y, GR) or 2SC3311A (Q, R)  
D37~40 : 1SS133 or HSS104  
D41~44 : S5688B

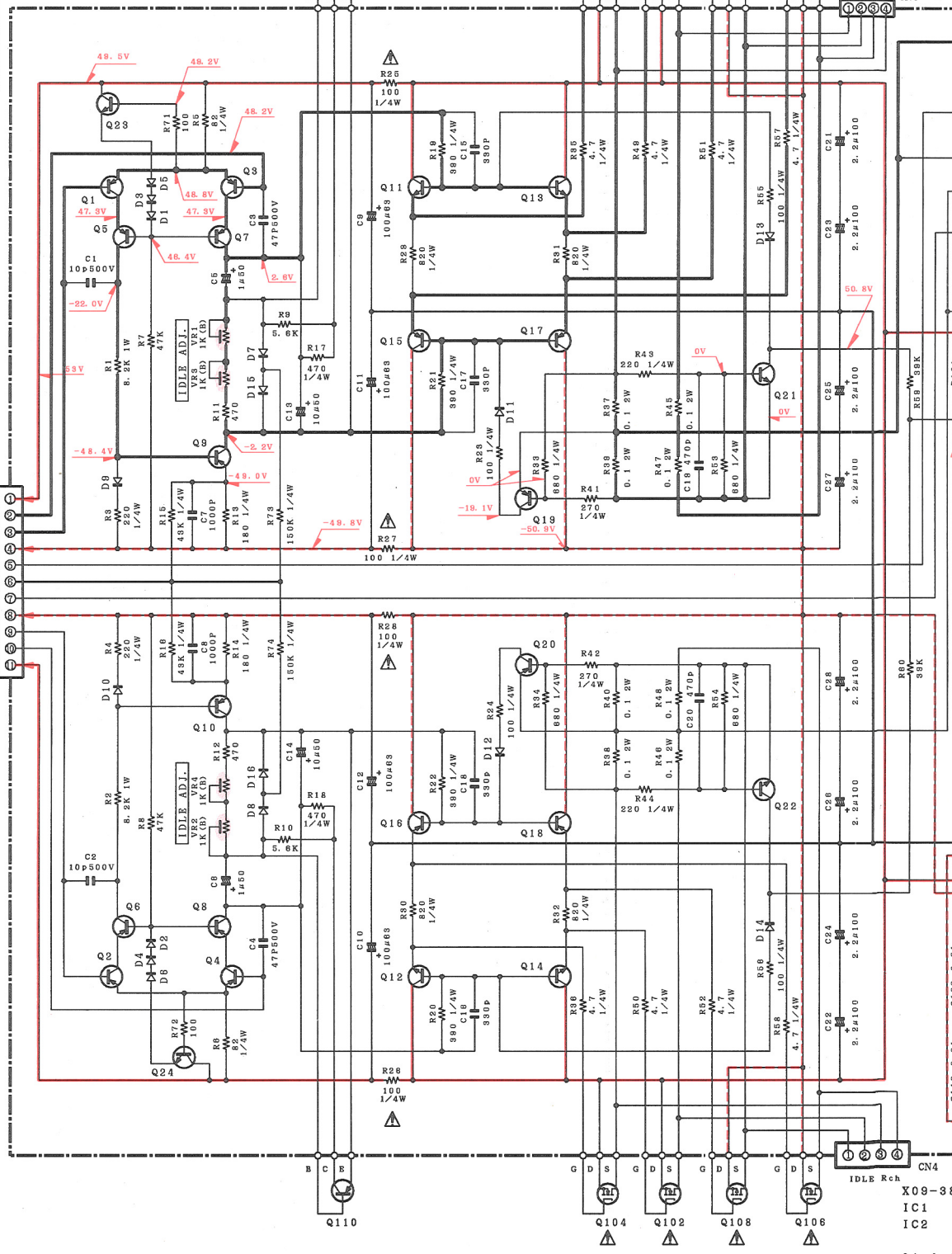
X08-259X-XX

COUNTRY	ABB	UNIT NAME	REF. NO
EUROPE	E	2-70	
NORTHERN EUROPE	L	2-70	
EUROPE	Y	2-91	
GENERAL MARKET	M	0-21	
AUSTRALIA	X	0-71	
ENGLAND	T	0-51	
CANADA	P	1-01	

X09-382X-XX A/2

COUNTRY	ABB	UNIT NAME	REF. NO	C122	J1	WH6
EUROPE	E	2-70	0.01	E20-0839-15	YES	
ENGLAND	T	2-70	0.01	E20-0839-15	YES	
EUROPE	Y	2-70	0.01	E20-0839-15	YES	
GENERAL MARKET	M	2-70	0.01	E20-0839-15	YES	
AUSTRALIA	X	2-70	0.01	E20-0839-15	YES	
NORTHERN EUROPE	L	1-71	0.01	E70-0029-05	YES	
CANADA	P	1-01	NO	E20-0839-15	NO	

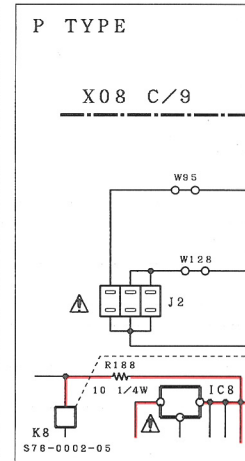
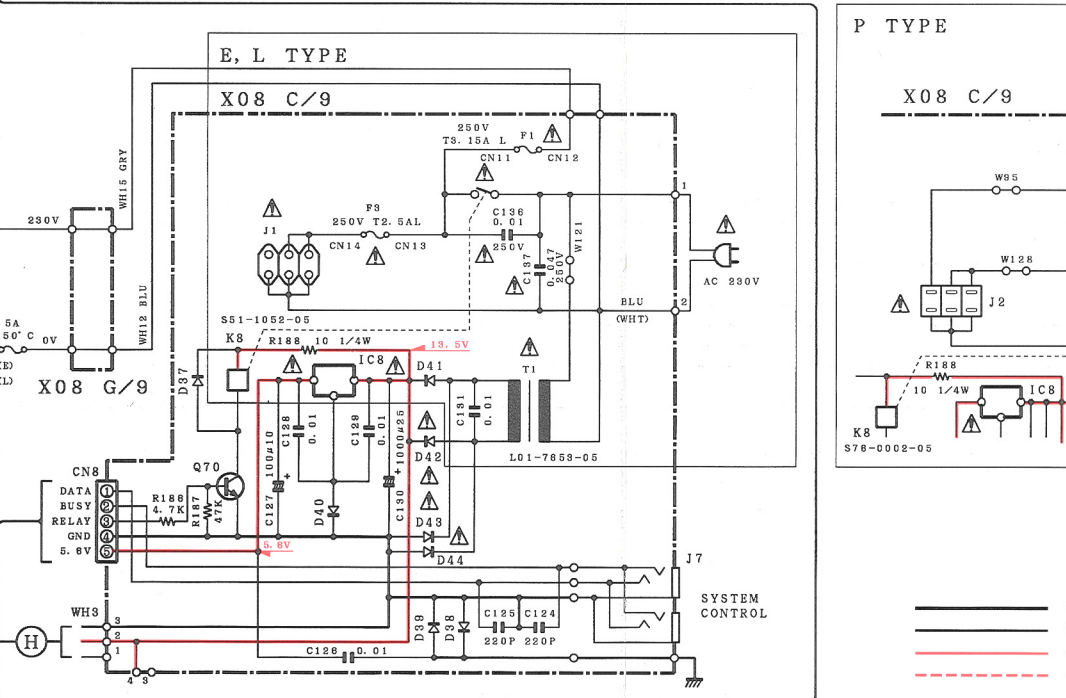
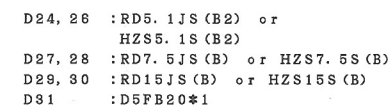
X09-382X-XX A/2



Q101, 102, 106, 109 : 2SJ200LBP4  
Q103, 104, 107, 108 : 2SK1529LBP4  
Q109, 110 : 2SC4137F18 (V, W)

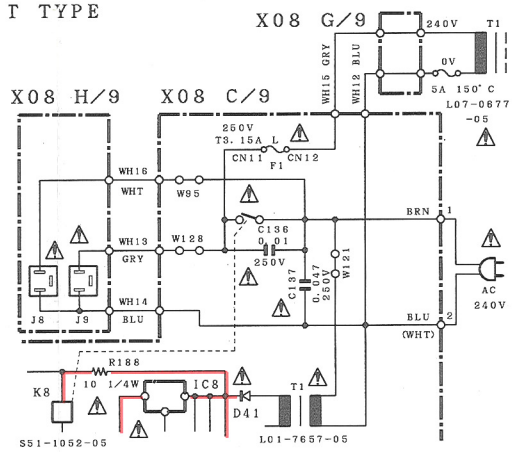
X09-38  
IC1  
IC2  
Q1~4, 1  
20, 31  
Q5~8  
Q9, 10  
Q11~14  
Q15~18



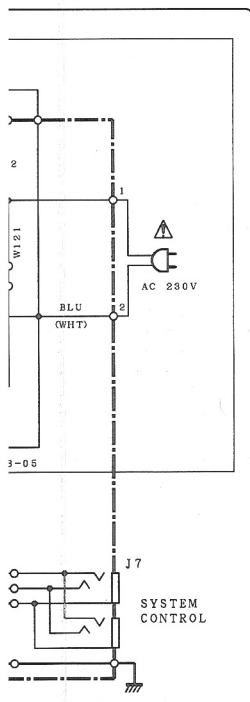
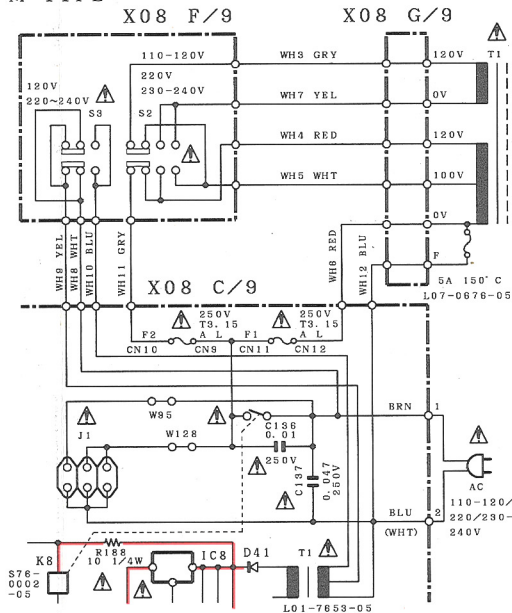




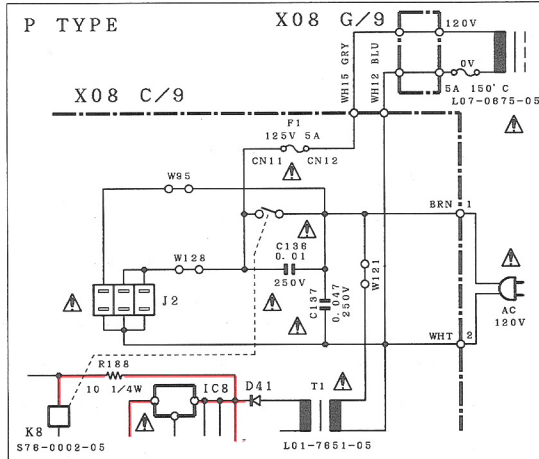
## T TYPE



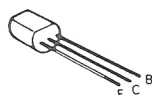
## M TYPE



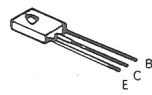
## P TYPE



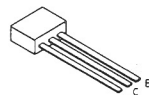
— SIGNAL LINE  
 --- GND LINE  
 — +B LINE  
 --- -B LINE



2SA1124  
 2SA992  
 2SC1845  
 2SC2632  
 2SC2878



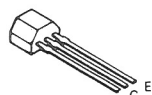
2SA1110



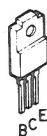
UN4212  
 2SA1309A  
 2SC3311A



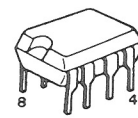
2SB1375  
 2SD2012



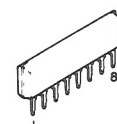
DTA124ES  
 DTC124ES  
 UN4112  
 2SA1048  
 2SC1740S  
 2SC2458



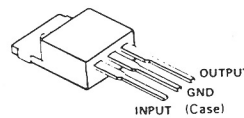
2SA1535  
 2SB1370  
 2SC3944  
 2SD2061



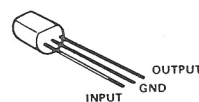
NJM4580D-D



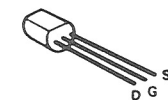
UPC1237HA



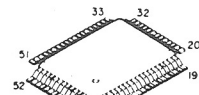
UPC7805HF



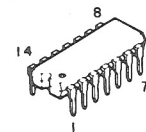
PST529D



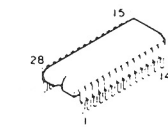
2SK170



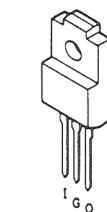
UPD75104GF-778



LC4966



TC9163N



TA7805S

DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

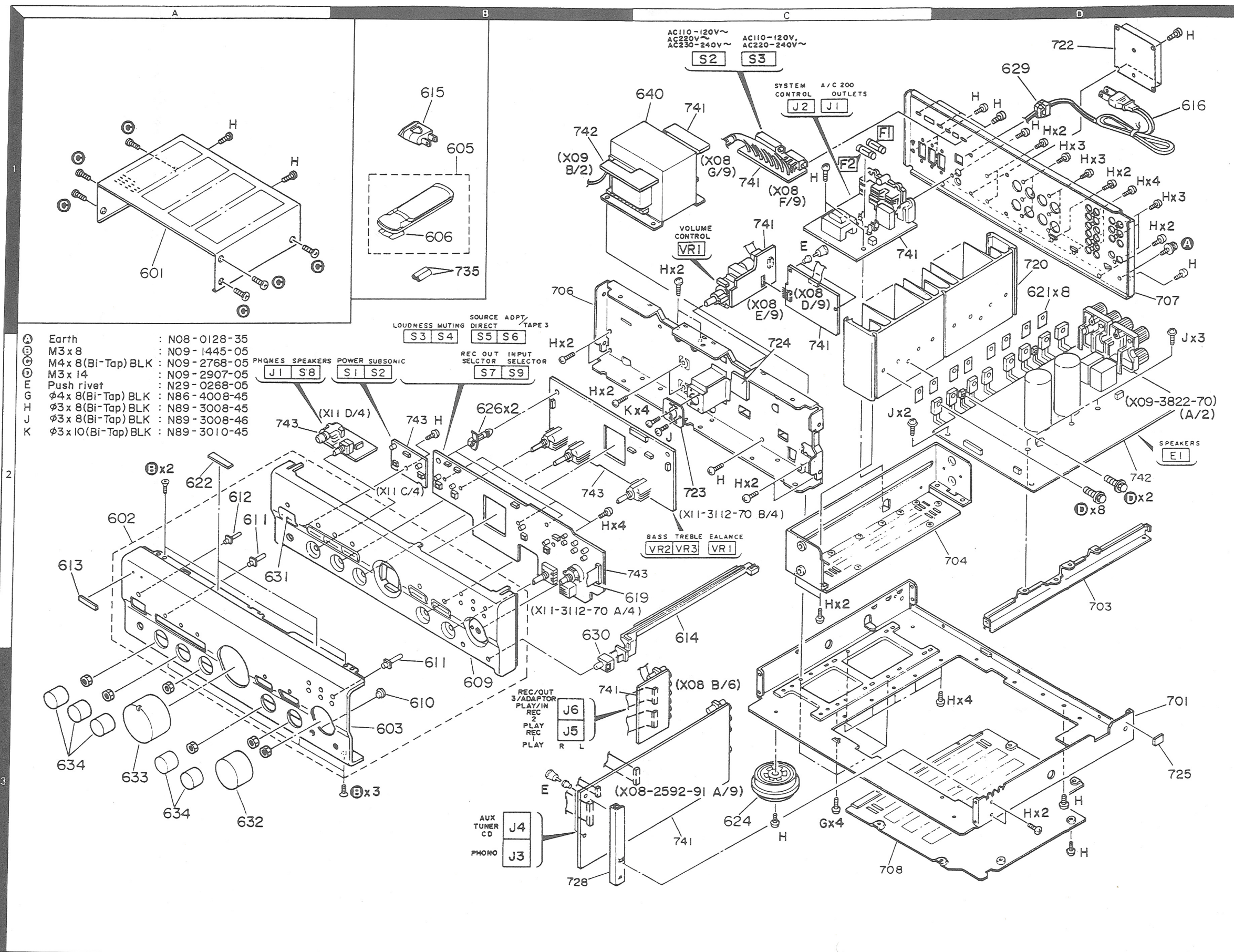
Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.



# KA-5050R

## EXPLODED VIEW





## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
<b>KA-5050R</b>						
601	1A	*	A01-3054-01	METALLIC CABINET		
602	2A	*	A60-0379-21	PANEL ASSY		
603	3B	*	A60-0380-02	PANEL		
605	1B	*	A70-0932-05	REMOTE CONTROLLER ASSY		
606	1B	*	A09-0146-08	BATTERY COVER		
609	3B		B01-0482-01	PANEL ESCUTCHEON		
610	2B		B11-0237-14	COLOR FILTER		
611	2A, 3B		B12-0163-04	INDICATOR		
612	2A		B12-0232-04	INDICATOR		
613	2A		B43-0287-04	KENWOOD BADGE		
-			B46-0094-03	WARRANTY CARD	Y	
-			B46-0095-03	WARRANTY CARD	Y	
-			B46-0096-33	WARRANTY CARD	X	
-			B46-0121-23	WARRANTY CARD	P	
-			B46-0122-23	WARRANTY CARD	EL	
-			B46-0143-13	WARRANTY CARD	T	
-			B58-0513-04	CAUTION CARD (PRESET220-240)	Y	
-		*	B60-1131-00	INSTRUCTION MANUAL (ENGLISH)		
-		*	B60-1132-00	INSTRUCTION MANUAL (FRENCH)	ELP	
-		*	B60-1133-00	INSTRUCTION MANUAL (CHINESE)	M	
-		*	B60-1134-00	INSTRUCTION MANUAL (SPANISH)	EM	
-		*	B60-1135-00	INSTRUCTION MANUAL (GE, DU, IT)	EL	
614	2C		D21-1658-03	EXTENSION SHAFT		
△ 615	1B		E03-0115-05	AC PLUG ADAPTER	M	
△ 616	1D		E30-0459-05	AC POWER CORD	ELM	
△ 616	1D		E30-0812-05	AC POWER CORD	Y	
△ 616	1D		E30-0974-05	AC POWER CORD	P	
△ 616	1D		E30-2714-05	AC POWER CORD	X	
△ 616	1D		E30-2718-05	AC POWER CORD	T	
△ 619	2C		E35-0148-05	FLAT CABLE		
-			E03-0141-05	AC OUTLET	X	
621	1D		F20-1322-05	INSULATING BOARD		
622	2A	*	G10-0185-04	NON-WOVEN FABRIC		
-		*	H50-0605-04	ITEM CARTON CASE	ELPYMX	
-		*	H50-0629-04	ITEM CARTON CASE	T	
-		*	H10-5166-12	POLYSTYRENE FOAMED FIXTURE (L)	ELPYMX	
-		*	H10-5167-02	POLYSTYRENE FOAMED FIXTURE (R)	ELPYMX	
-		*	H10-5501-02	POLYSTYRENE FOAMED FIXTURE (L)	T	
-		*	H10-5502-02	POLYSTYRENE FOAMED FIXTURE (R)	T	
-			H25-0225-04	PROTECTION BAG (850X450X0.03)	ELPYMX	
-			H25-0232-04	PROTECTION BAG (235X350X0.03)	ELPYMX	
-			H25-0651-04	PROTECTION BAG (0232 PRINTED)	T	
-			H25-0654-04	PROTECTION BAG (0225 PRINTED)	T	
624	3C		J02-1072-05	FOOT		
626	2B		J19-3328-15	UNIT HOLDER		
△ 629	1D		J42-0083-05	POWER CORD BUSHING		
-			J61-0307-05	WIRE BAND		
630	2B		K29-3405-04	KNØB CARTRIDGE (MM/MC)		
631	2A		K29-4210-03	KNØB POWER		
632	3A		K29-4212-04	KNØB INPUT SELECTOR		

L:Scandinavia

K:USA

P:Canada

Y:PX(Far East, Hawaii)

T:England

E:Europe

Y:AAFES(Europe)

X:Australia

M:Other Areas

△ indicates safety critical components.

## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
633	3A	*	K29-4213-14	KNØB VOLUME		
634	3A	*	K29-4216-04	KNØB SP, TONE, BAL, REC OUT SEL		
△ 640	1C	*	L07-0674-05	POWER TRANSFORMER	E P Y M X T L	
△ 640	1C	*	L07-0675-05	POWER TRANSFORMER		
△ 640	1C	*	L07-0676-05	POWER TRANSFORMER		
△ 640	1C	*	L07-0677-05	POWER TRANSFORMER		
△ 640	1C	*	L07-0774-05	POWER TRANSFORMER		
A	1D		N08-0128-35	BINDING POST (EARTH)		
B	2A, 3B		N09-1445-05	SET SCREW (M3X8)		
C	1A		N09-2768-05	SEMS (TAPTITE SCREW)(4X8)		
D	2D		N09-2907-05	SEMS (TAPTITE SCREW)(3X14)		
E	3B, 1C		N29-0268-05	PUSH RIVET		
G	1D, 3D		N86-4008-45	BINDING HEAD TAPTITE SCREW		
H	2C, 2D		N89-3008-45	BINDING HEAD TAPTITE SCREW		
J	2C		N89-3008-46	BINDING HEAD TAPTITE SCREW		
K	3C		N89-3010-45	BINDING HEAD TAPTITE SCREW		
<b>PREAMPLIFIER UNIT (X08-259X-XX)</b>						
C1 -6			CF92FV1H151K	MF 150PF	K	
C7 ,8			CF92FV1H101K	MF 100PF	K	
C9 -12			CF92FV1H122J	MF 1200PF	J	
C13 ,14			CF92FV1H472J	MF 4700PF	J	
C15 ,16			CC45FSL1H560J	CERAMIC 56PF	J	
C17 ,18			CF92FV1H393J	MF 0.039UF	J	
C19 ,20			CF92FV1H113J	MF 0.011UF	J	
C21 ,22			C90-1951-05	ELECTRO 3300UF	6.3WV	
C23 ,24			CE04KW1V100M	ELECTRO 10UF	35WV	
C25 ,26			CF92FV1H332J	MF 3300PF	J	
C29 ,30			CF92FV1H103J	MF 0.010UF	J	
C31 ,32			CF92FV1H151K	MF 150PF	K	
C33 ,34			CF92FV1H221K	MF 220PF	K	
C35 -46			CF92FV1H151K	MF 150PF	K	
C51 ,52			CE04KW1H3R3M	ELECTRO 3.3UF	50WV	
C53 ,54			CF92FV1H101K	MF 100PF	K	
C55 ,56			CF92FV1H122J	MF 1200PF	J	
C57 -60			CF92FV1H102J	MF 1000PF	J	
C61 ,62			CF92FV1H221K	MF 220PF	K	
C65 -68			CE04KW1V470M	ELECTRO 47UF	35WV	
C69 ,70			CE04KW1C221M	ELECTRO 220UF	16WV	
C73 ,74			C90-1917-05	ELECTRO 100UF	16WV	
C75 ,76			C91-1466-05	FILM 22PF	K	
C77 ,78			CF92FV1H101K	MF 100PF	K	
C101			CE04KW1E101M	ELECTRO 100UF	25WV	
C102,103			CF92FV1H103J	MF 0.010UF	J	
C104,105			CE04KW1E221M	ELECTRO 220UF	25WV	
C106,107			CE04KW1V100M	ELECTRO 10UF	35WV	
C108			CE04KW1A101M	ELECTRO 100UF	10WV	
C109,110			CF92FV1H104J	MF 0.10UF	J	
C111,112			CE04KW1V101M	ELECTRO 100UF	35WV	
C113,114			CE04KW1V100M	ELECTRO 10UF	35WV	
C115			CE04KW1C101M	ELECTRO 100UF	16WV	
C117-123			CE04KW1V330M	ELECTRO 33UF	35WV	
C124,125			CC45FSL1H221J	CERAMIC 220PF	J	
C126			CK45FF1H103Z	CERAMIC 0.010UF	Z	
C127			CE04KW1A101M	ELECTRO 100UF	10WV	

L:Scandinavia

K:USA

P:Canada

Y:PX(Far East, Hawaii)

T:England

E:Europe

Y:AAFES(Europe)

X:Australia

M:Other Areas

△ indicates safety critical components.



## PARTS LIST

× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
C128,129 C130 C131 C132 C134			CF92FV1H103J CE04KW1E102M CF92FV1H103J CE04KW1V100M CF92FV1H223J	MF 0.010UF J ELECTRO 1000UF 25WV MF 0.010UF J ELECTRO 10UF 35WV MF 0.022UF J		
△ C135 △ C136 △ C137 △ C138,139 △ C140,141  C142,143			CE04KW1V100M C91-1439-05 C91-1444-05 CF92FV1H103J CE04KW1V100M  CE04KW1H010M	ELECTRO 10UF 35WV FILM 0.01UF 250VAC MF 0.047UF 250VAC MF 0.010UF J ELECTRO 10UF 35WV  ELECTRO 1.0UF 50WV		
△ J1 △ J2 J3 J4 -6 J7		*	E03-0143-05 E03-0142-05 E13-0294-05 E13-0634-05 E11-0188-05	AC OUTLET AC OUTLET PHONE JACK (1P) PHONE JACK (3P) MINIATURE PHONE JACK	ELM PY	
△ J8 ,9			E03-0109-05	AC OUTLET	T	
△ F1 △ F1 △ F1 ,2 △ F3			F04-5022-05 F05-3121-05 F05-3121-05 F05-2525-05	FUSE (UL) (125V 5A UL) FUSE (SEMKO) (250V T3.15A) FUSE (SEMKO) (250V T3.15A) FUSE (SEMKO) (250V T2.5A)	P ELXT YM EL	
- CN9 -12 CN11-14 CN11,12			J11-0098-05 J13-0075-05 J13-0075-05 J13-0075-05	WIRE CLAMPER FUSE CLIP FUSE CLIP FUSE CLIP	YM EL PXT	
△ L1 ,2 △ T1 △ T1 △ T1			L40-1011-47 L01-7651-05 L01-7653-05 L01-7657-05	SMALL FIXED INDUCTOR(100UH,K) POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER	P ELYM XT	
R33 ,34 R35 ,36 R99 ,100 R101,102 R151			RN14BK2C8202FTS RN14BK2C6801FTS RN14BK2E1502FTS RN14BK2E1003FTS RD14AB2E101JTS	RN 82.0K F 1/6W RN 6.80K F 1/6W RN 15.0K F 1/4W RN 100K F 1/4W FL-PROOF RD 100 J 1/4W		
R160 R162,163 R183 R188 VR1			RD14AB2E472JTS RD14AB2E472JTS RD14AB2E330JTS RD14AB2E100JTS R29-5059-05	FL-PROOF RD 4.7K J 1/4W FL-PROOF RD 4.7K J 1/4W FL-PROOF RD 33 J 1/4W FL-PROOF RD 10 J 1/4W POTENTIOMETER		
△ K1 -7 △ K8 △ K8 △ S1 △ S2			S76-0027-05 S51-1052-05 S76-0002-05 S40-6036-05 S31-2322-05	MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY PUSH SWITCH SLIDE SWITCH	ELXT PYM	
△ S3			S62-0001-05	SLIDE SWITCH	YM	
D1 ,2 D3 -8 D3 -8 D9 ,10 D11 -20			E-102 HZS5.1S(B2) RD5.1JS(B2) E-501 HSS104	CONSTANT CURRENT DIODE ZENER DIODE ZENER DIODE CONSTANT CURRENT DIODE DIODE		
D11 -20 D21			1SS133 HZS5.1S(B2)	DIODE ZENER DIODE		

L:Scandinavia

K:USA

P:Canada

Y:PX(Far East, Hawaii)

T:England

E:Europe

Y:AAFES(Europe)

X:Australia

M:Other Areas

△ indicates safety critical components.



PARTS LIST

× New Parts  
Parts without Parts No. are not supplied.  
Les articles non mentionnes dans le Parts No. ne sont pas fournis.  
Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
D21			RD5.1JS(B2)	ZENER DIODE		
D22 ,23			HZS7.5S(B)	ZENER DIODE		
D22 ,23			RD7.5JS(B)	ZENER DIODE		
D24 ,25			HZS15S(B)	ZENER DIODE		
D24 ,25			RD15JS(B)	ZENER DIODE		
D26 ,27			HZS30N(B)	ZENER DIODE		
D26 ,27			RD30ES(B)	ZENER DIODE		
D28 ,29			HZS7.5S(B)	ZENER DIODE		
D28 ,29			RD7.5JS(B)	ZENER DIODE		
D30 -40			HSS104	DIODE		
D30 -40			1SS133	DIODE		
D41 -44			S5688B	DIODE		
D45			HZS2.7N(B)	ZENER DIODE		
D45			RD2.7ES(B)	ZENER DIODE		
D46 -49			HSS104	DIODE		
D46 -49			1SS133	DIODE		
IC1 ,2			NJM4565D-D	IC(OP AMP X2)		
IC3 -6			LC4966	IC(CMOS LOGIC BILATERAL SW)		
IC7			TA8409S	IC(MOTOR CONTROL)		
IC8			TA7805S	IC(VOLTAGE REGULATOR/ +5V)		
IC8			UPC7805HF	IC(VOLTAGE REGULATOR/ +5V)		
Q1 -4			2SC1845(F,E)	TRANSISTOR		
Q5 -8			2SK170(BL)	FET		
Q5 -8			2SK170(V)	FET		
Q13 ,14			2SC2878(B)	TRANSISTOR		
Q15 -18			2SC2632(R,S)	TRANSISTOR		
Q19 -22			2SC1845(F,E)	TRANSISTOR		
Q23 ,24			2SC2458(Y,GR)	TRANSISTOR		
Q23 ,24			2SC3311A(Q,R)	TRANSISTOR		
Q25 ,26			2SA1048(Y,GR)	TRANSISTOR		
Q25 ,26			2SA1309A(Q,R)	TRANSISTOR		
Q27 ,28			2SA992(F,E)	TRANSISTOR		
Q29 ,30			2SA1048(Y,GR)	TRANSISTOR		
Q29 ,30			2SA1309A(Q,R)	TRANSISTOR		
Q41 -43			2SD2012	TRANSISTOR		
Q41 -43		*	2SD2061(E,F)	TRANSISTOR		
Q44		*	2SB1370(E,F)	TRANSISTOR		
Q44			2SB1375	TRANSISTOR		
Q45			2SA992(F,E)	TRANSISTOR		
Q46			2SC1845(F,E)	TRANSISTOR		
Q47 -53			DTC124ES	DIGITAL TRANSISTOR		
Q47 -53			UN4212	DIGITAL TRANSISTOR		
Q54 -61			DTA124ES	DIGITAL TRANSISTOR		
Q54 -61			UN4112	DIGITAL TRANSISTOR		
Q62 -69			DTC124ES	DIGITAL TRANSISTOR		
Q62 -69			UN4212	DIGITAL TRANSISTOR		
Q70			2SC2458(Y,GR)	TRANSISTOR		
Q70			2SC3311A(Q,R)	TRANSISTOR		
Q71			DTA124ES	DIGITAL TRANSISTOR		
Q71			UN4112	DIGITAL TRANSISTOR		
AUDIO UNIT (X09-382X-XX)						
C1 ,2		*	CC45FSL2H100D	CERAMIC 10PF D		
C3 ,4			CC45FSL2H470J	CERAMIC 47PF J		
C5 ,6			CE04KW1H1ROM	ELECTRO 1.0UF 50WV		
C7 ,8			CF92FV1H102J	MF 1000PF J		

L:Scandinavia      K:USA      P:Canada  
Y:PX(Far East, Hawaii)      T:England      E:Europe  
Y:AAFES(Europe)      X:Australia      M:Other Areas

⚠ indicates safety critical components.



## PARTS LIST

× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
C9 -12 C13 ,14 C15 -18 C19 ,20 C21 -28			CE04DW1J101M CE04KW1H100M CF92FV1H331K CF92FV1H471J CE04KW2A2R2M	ELECTRO 100UF 63WV ELECTRO 10UF 50WV MF 330PF K MF 470PF J ELECTRO 2.2UF 100WV		
C29 ,30 C31 ,32 C33 -36 C37 -40 C41 ,42			CF92FV1H683J CF92FV1H124J CF92FV1H104J CF92FV1H561J CF92FV1H682J	MF 0.068UF J MF 0.12UF J MF 0.10UF J MF 560PF J MF 6800PF J		
C43 ,44 C45 ,46 C47 ,48 C49 ,50 C101,102			CK45FB1H222K CF92FV1H682J CK45FB1H222K CF92FV1H683J CE04KW1V100M	CERAMIC 2200PF K MF 6800PF J CERAMIC 2200PF K MF 0.068UF J ELECTRO 10UF 35WV		
C103 C104 C105 C106 C107			CE04KW1A101M CE04KW1C220M CE04HW1A220M CF92FV1H103J CE04KW1H4R7M	ELECTRO 100UF 10WV ELECTRO 22UF 16WV NP-ELEC 22UF 10WV MF 0.010UF J ELECTRO 4.7UF 50WV		
C108 C109,110 C111,112 C113 C114			CE04KW1C330M CF92FV1H103J CE04KW1E221M CE04KW1V100M CE04KW1H330M	ELECTRO 33UF 16WV MF 0.010UF J ELECTRO 220UF 25WV ELECTRO 10UF 35WV ELECTRO 33UF 50WV		
C115,116 C117,118 C119 C121 C122		*	CF92FV1H104J C90-3500-05 CK45FE2H103P CE04KW1V100M CF92FV1H103J	MF 0.10UF J ELECTRO 10000UF 63WV CERAMIC 0.010UF P ELECTRO 10UF 35WV MF 0.010UF J	ELYMXT	
J1 J1 -			E20-0839-15 E70-0029-05 J11-0098-05	SCREW TERMINAL BOARD SCREW TERMINAL BOARD WIRE CLAMPER	EPYMXTL	
L1 ,2			L39-1318-05	PHASE COMPENSATION COIL		
R1 ,2 R3 ,4 R5 ,6 R13 ,14 R19 -22			RS14DB3A822JTE RD14AB2E221JTS RD14AB2E820JTS RD14AB2E181JTS RD14AB2E391JTS	FL-PROOF RS 8.2K J 1W FL-PROOF RD 220 J 1/4W FL-PROOF RD 82 J 1/4W FL-PROOF RD 180 J 1/4W FL-PROOF RD 390 J 1/4W		
R23 -28 R29 -32 R33 ,34 R35 ,36 R37 -40			RD14AB2E101JTS RD14AB2E821JTS RD14AB2E681JTS RD14AB2E4R7JTS R92-0205-05	FL-PROOF RD 100 J 1/4W FL-PROOF RD 820 J 1/4W FL-PROOF RD 680 J 1/4W FL-PROOF RD 4.7 J 1/4W METAL-PLATE 0.1 K 2W		
R41 ,42 R43 ,44 R45 -48 R49 -52 R53 ,54			RD14AB2E271JTS RD14AB2E221JTS R92-0205-05 RD14AB2E4R7JTS RD14AB2E681JTS	FL-PROOF RD 270 J 1/4W FL-PROOF RD 220 J 1/4W METAL-PLATE 0.1 K 2W FL-PROOF RD 4.7 J 1/4W FL-PROOF RD 680 J 1/4W		
R55 ,56 R57 ,58 R63 ,64 R65 ,66		*	RD14AB2E101JTS RD14AB2E4R7JTS RS14GB3D100JKW RD14AB2E2R2JTS	FL-PROOF RD 100 J 1/4W FL-PROOF RD 4.7 J 1/4W FL-PROOF RS 10 J 2W FL-PROOF RD 2.2 J 1/4W		

L:Scandinavia

K:USA

P:Canada

Y:PX(Far East, Hawaii)

T:England

E:Europe

Y:AAFES(Europe)

X:Australia

M:Other Areas

△ indicates safety critical components.



PARTS LIST

× New Parts  
Parts without Parts No. are not supplied.  
Les articles non mentionnes dans le Parts No. ne sont pas fournis.  
Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
R67 ,68 R69 ,70 R103 R106 R108		*	RD14AB2E330JTS RS14GB3D100JKW RS14DB3A561JTE RS14DB3A561JTE RS14DB3A332JTE	FL-PROOF RD 33 J 1/4W FL-PROOF RS 10 J 2W FL-PROOF RS 560 J 1W FL-PROOF RS 560 J 1W FL-PROOF RS 3.3K J 1W		
R109 R124 R126 R127 R128-132			RS14DB3A103JTE RD14AB2E472JTS RS14DB3D122JTE RS14DB3D561JTE RS14DB3D122JTE	FL-PROOF RS 10K J 1W FL-PROOF RD 4.7K J 1/4W FL-PROOF RS 1.2K J 2W FL-PROOF RS 560 J 2W FL-PROOF RS 1.2K J 2W		
R133,134 VR1 -4			RS14DB3D102JTE R12-1616-05	FL-PROOF RS 1.0K J 2W TRIMMING POT.(1K)		
K1 ,2 K3		*	S51-2092-05 S76-0028-05	MAGNETIC RELAY MAGNETIC RELAY		
D1 -12 D1 -12 D13 ,14 D13 ,14 D15 ,16			HSS104 1SS133 HSS104A 1SS131 HSS104	DIODE DIODE DIODE DIODE DIODE		
D15 ,16 D21 -23 D21 -23 D24 D24			1SS133 HSS104A 1SS131 HZS5.1S(B2) RD5.1JS(B2)	DIODE DIODE DIODE ZENER DIODE ZENER DIODE		
D25 D25 D26 D26 D27 ,28			HSS104A 1SS131 HZS5.1S(B2) RD5.1JS(B2) HZS7.5S(B)	DIODE DIODE ZENER DIODE ZENER DIODE ZENER DIODE		
D27 ,28 D29 ,30 D29 ,30 D31 D32 ,33			RD7.5JS(B) HZS15S(B) RD15JS(B) D5FB20*1 HSS104	ZENER DIODE ZENER DIODE ZENER DIODE DIODE DIODE		
D32 ,33 IC1 IC2 Q1 -4 Q5 -8			1SS133 UPC1237HA NJM4565D-D 2SA992(F,E) 2SA1124(R,S)	DIODE IC(POWER AMP) IC(OP AMP X2) TRANSISTOR TRANSISTOR		
Q9 ,10 Q11 -14 Q15 -18 Q19 ,20 Q21 -24			2SC2632(R,S) 2SC3944(R,S) 2SA1535(R,S) 2SA992(F,E) 2SC1845(F,E)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
Q31 Q32 ,33 Q34 ,35 Q34 ,35 Q101,102		*	2SA992(F,E) 2SA1110(Q,R) 2SD2012 2SD2061(E,F) 2SJ200LBP4	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR FET		
Q103,104 Q105,106 Q107,108 Q109,110		*	2SK1529LBP4 2SJ200LBP4 2SK1529LBP4 2SC4137F19(V,W)	FET FET FET TRANSISTOR		

L:Scandinavia K:USA P:Canada  
Y:PX(Far East, Hawaii) T:England E:Europe  
Y:AAFES(Europe) X:Australia M:Other Areas

⚠ indicates safety critical components.




PARTS LIST

※ New Parts  
Parts without Parts No. are not supplied.  
Les articles non mentionnes dans le Parts No. ne sont pas fournis.  
Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
CONTROL UNIT (X11-3112-70)						
D14 -19			B30-1291-05	LED		
D20			B30-1290-05	LED		
D21 -25			B30-1291-05	LED		
C3 -6			CF92FV1H224J	MF	0.22UF J	
C7 ,8			CF92FV1H203J	MF	0.020UF J	
C9 ,10			CF92FV1H683J	MF	0.068UF J	
C11 ,12			CF92FV1H334J	MF	0.33UF J	
C15 ,16			C90-1886-05	ELECTRO	4.7UF 25WV	
C17 ,18			CF92FV1H391K	MF	390PF K	
C19 ,20			CF92FV1H154J	MF	0.15UF J	
C21 ,22			CF92FV1H221K	MF	220PF K	
C23 ,24			CF92FV1H101K	MF	100PF K	
C25 ,26			CF92FV1H471J	MF	470PF J	
C27 ,28			CF92FV1H102J	MF	1000PF J	
C29 -34			CE04KW1H010M	ELECTRO	1.0UF 50WV	
C35 -38			CE04KW1C220M	ELECTRO	22UF 16WV	
C39 -42			CF92FV1H473J	MF	0.047UF J	
C43 ,44			CE04KW1E101M	ELECTRO	100UF 25WV	
C45			CK45FF1H103Z	CERAMIC	0.010UF Z	
C46			CC45FSL1H101J	CERAMIC	100PF J	
C47 ,48			CF92FV1H102J	MF	1000PF J	
C49			C90-1826-05	BACKUP	0.047F 5.5WV	
C50			CK45FF1H103Z	CERAMIC	0.010UF Z	
C51			CE04KW1H0R1M	ELECTRO	0.1UF 50WV	
C52 ,53			CK45FB1H332K	CERAMIC	3300PF K	
C55			CE04KW1V4R7M	ELECTRO	4.7UF 35WV	
C56			CE04KW1H010M	ELECTRO	1.0UF 50WV	
C57			CE04KW1A101M	ELECTRO	100UF 10WV	
C58			CE04KW1V4R7M	ELECTRO	4.7UF 35WV	
C64			CE04KW1A101M	ELECTRO	100UF 10WV	
C67			CK45FF1H103Z	CERAMIC	0.010UF Z	
C68 ,69			CF92FV1H104J	MF	0.10UF J	
J1			E11-0208-05	PHONE JACK		
			F10-0575-04	SHIELDING PLATE		
L3 ,4			L40-1021-14	SMALL FIXED INDUCTOR(1.0MH,K)		
X1			L78-0267-05	RESONATOR 4.194MHz		
R51 ,52			RS14DB3D221JTE	FL-PROOF RS 220 J 2W		
R53 ,54			RS14DB3D151JTE	FL-PROOF RS 150 J 2W		
R55 ,56			RS14DB3D221JTE	FL-PROOF RS 220 J 2W		
VR1			R06-5190-05	POTENTIOMETER		
VR2 ,3			R06-2025-05	POTENTIOMETER		
S1 -6			S40-1064-05	PUSH SWITCH		
S7			S60-0010-05	ROTARY SWITCH		
S8			S29-2035-05	ROTARY SWITCH		
S9			T99-0521-05	ROTARY ENCODER		
D1			HSS104A	DIODE		
D1			1SS131	DIODE		
D2 -13			HSS104	DIODE		
D2 -13			1SS133	DIODE		
D26 ,27			HSS104	DIODE		

L:Scandinavia      K:USA      P:Canada  
Y:PX(Far East, Hawaii)      T:England      E:Europe  
Y:AAFES(Europe)      X:Australia      M:Other Areas

 indicates safety critical components.




PARTS LIST

× New Parts  
Parts without Parts No. are not supplied.  
Les articles non mentionnés dans le Parts No. ne sont pas fournis.  
Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
D26 ,27			1SS133	DIODE		
IC1			NJM4565D-D	IC(OP AMP X2)		
IC2			NJM4580D-D	IC(OP AMP X2)		
IC3			NJM4565D-D	IC(OP AMP X2)		
IC4			TC9163N	IC(BILATERAL SWITCH X16)		
IC5			UPD75104GF-778	IC(4BIT MICROPROCESSOR)		
IC6			PST529D	IC(SYSTEM RESET)		
Q1 ,2			2SC1740S(Q,R)	TRANSISTOR		
Q1 ,2			2SC3311A(Q,R)	TRANSISTOR		
Q3 ,4			DTA124ES	DIGITAL TRANSISTOR		
Q3 ,4			UN4112	TRANSISTOR		
A1			W02-1046-05	ELECTRIC CIRCUIT MODULE		

L:Scandinavia      K:USA      P:Canada  
Y:PX(Far East, Hawaii)      T:England      E:Europe  
Y:AAFES(Europe)      X:Australia      M:Other Areas

 indicates safety critical components.



## SPECIFICATIONS

## For U.S.A. and Canada

## Continuous rated power output (FTC)

80 watts per channel minimum RMS, both channels driven, at 8  $\Omega$  from 20 Hz to 20,000 Hz with no more than 0.04% total harmonic distortion.

Dynamic power ..... 110 W (8  $\Omega$ )  
180 W (4  $\Omega$ )

Damping factor ..... 220 (50 Hz)

Total harmonic distortion ..... 0.04%  
(20 Hz ~ 20,000 Hz, 80 W, 8  $\Omega$ )

..... 0.002%  
(1 kHz, 40 W, 8  $\Omega$ )

Intermodulation distortion ..... 0.002% (80 W, 8  $\Omega$ )  
(70 Hz : 7 kHz = 4 : 1)

## Frequency response (IHF '78)

TUNER/AUX/TAPE1, 2/CD

..... 5 Hz ~ 100 kHz, +0 dB, -3 dB

PHONO 'RIAA' response ..... 20 Hz ~ 20 kHz,  
+0.3 dB, -0.3 dB

## Maximum input level

PHONO (MM) ..... 120 mV, 0.03% T.H.D. at 1 kHz

PHONO (MC) ..... 10 mV, 0.03% T.H.D. at 1 kHz

## Signal to noise ratio

PHONO (MM) ..... 87 dB (IHF '66)

79 dB (IHF '78)

PHONO (MC) ..... 68 dB (IHF '66)

74 dB (IHF '78)

TUNER/AUX/TAPE1, 2/CD ..... 104 dB (IHF '66)

80 dB (IHF '78)

## Input sensitivity/impedance

PHONO (MM) ..... 2.5 mV/47 k $\Omega$

PHONO (MC) ..... 0.2 mV/100  $\Omega$

TUNER/AUX/TAPE1, 2/CD ..... 200 mV/47 k $\Omega$

ADAPTOR IN ..... 200 mV/47 k $\Omega$

## Tone control

BASS .....  $\pm 10$  dB (at 100 Hz)

TREBLE .....  $\pm 10$  dB (at 10 kHz)

## Filter

SUBSONIC filter ..... 18 Hz, -12 dB/oct

## Loudness control

(VOLUME at -30 dB level) ..... +6 dB (100 Hz)

+3 dB (10 kHz)

## Output level/impedance

TAPE REC ..... 200 mV/300  $\Omega$

ADAPTOR OUT ..... 200 mV/300  $\Omega$

## General

## Power consumption

For Canada ..... 3 A

For U.S. Military ..... 270 W

## AC outlets

For Canada

SWITCHED ..... 3; (Total 200 W, 1.6 A max.)

For U.S. Military

SWITCHED ..... 3; (Total 200 W max.)

Dimensions ..... W: 440 mm (17-5/16")

H: 147 mm (5-13/16")

D: 403 mm (15-7/8")

Weight (net) ..... 12 kg (26.5 lb)

## For U.K. and Europe

## Continuous rated power output

(DIN) 1 kHz, at 8  $\Omega$  ..... 95 W + 95 W

at 4  $\Omega$  ..... 140 W + 140 W

(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.

at 8  $\Omega$  ..... 90 W + 90 W

at 4  $\Omega$  ..... 135 W + 135 W

Dynamic power ..... 105 W (8  $\Omega$ )

175 W (4  $\Omega$ )

Damping factor ..... 220 (50 Hz)

Total harmonic distortion ..... 0.04%

(20 Hz ~ 20,000 Hz, 80 W, 8  $\Omega$ )

..... 0.002% (1 kHz, 40 W, 8  $\Omega$ )

Intermodulation distortion ..... 0.002% (80 W, 8  $\Omega$ )

(70 Hz : 7 kHz = 4 : 1)

## Frequency response (IHF '78)

TUNER/AUX/TAPE1, 2/CD

..... 5 Hz ~ 100 kHz, +0 dB, -3 dB

PHONO 'RIAA' response ..... 20 Hz ~ 20 kHz,

+0.3 dB, -0.3 dB

## Maximum input level

PHONO (MM) ..... 120 mV, 0.03% T.H.D. at 1 kHz

PHONO (MC) ..... 10 mV, 0.03% T.H.D. at 1 kHz

## Signal to noise ratio

PHONO (MM) ..... 87 dB (IHF '66)

79 dB (IHF '78)

PHONO (MC) ..... 68 dB (IHF '66)

74 dB (IHF '78)

TUNER/AUX/TAPE1, 2/CD ..... 104 dB (IHF '66)

80 dB (IHF '78)

PHONO (MM) ..... 58 dB (DIN, 50 mW output)

TUNER/AUX/TAPE1, 2/CD

..... 59 dB (DIN, 50 mW output)

## Input sensitivity/impedance

PHONO (MM) ..... 2.5 mV/47 k $\Omega$

PHONO (MC) ..... 0.2 mV/100  $\Omega$

TUNER/AUX/TAPE1, 2/CD ..... 200 mV/47 k $\Omega$

ADAPTOR IN ..... 200 mV/47 k $\Omega$

## Tone control

BASS .....  $\pm 10$  dB (at 100 Hz)

TREBLE .....  $\pm 10$  dB (at 10 kHz)

## Filter

SUBSONIC filter ..... 18 Hz, -12 dB/oct

## Loudness control

(VOLUME at -30 dB level) ..... +6 dB (100 Hz)

+3 dB (10 kHz)

## Output level/impedance

TAPE REC ..... 200 mV/300  $\Omega$

ADAPTOR OUT ..... 200 mV/300  $\Omega$

## General

Power consumption ..... 270 W (IEC)

## AC outlets

For U.K.

SWITCHED ..... 2; (Total 200 W max.)

For Europe

SWITCHED ..... 3; (Total 200 W max.)

Dimensions ..... W: 440 mm

H: 147 mm

D: 403 mm

Weight (net) ..... 12 kg



# KA-5050R

## SPECIFICATIONS

### For other countries

Continuous rated power output	
(IHF '66) From 20 Hz to 20,000 Hz 0.04% T.H.D.	
at 8 $\Omega$ .....	80 W + 80 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	
at 8 $\Omega$ .....	90 W + 90 W
at 4 $\Omega$ .....	135 W + 135 W
Dynamic power .....	105 W (8 $\Omega$ )
	175 W (4 $\Omega$ )
Damping factor .....	220 (50 Hz)
Total harmonic distortion .....	0.04%
	(20 Hz ~ 20,000 Hz, 80 W, 8 $\Omega$ )
	0.002%
	(1 kHz, 40 W, 8 $\Omega$ )
Intermodulation distortion .....	0.002% (80 W, 8 $\Omega$ )
(70 Hz : 7 kHz = 4 : 1)	
Frequency response (IHF '78)	
TUNER/AUX/TAPE1, 2/CD	
.....	5 Hz ~ 100 kHz, +0 dB, -3 dB
PHONO 'RIAA' response .....	20 Hz ~ 20 kHz,
	+0.3 dB, -0.3 dB
Maximum input level	
PHONO (MM) .....	120 mV, 0.03% T.H.D. at 1 kHz
PHONO (MC) .....	10 mV, 0.03% T.H.D. at 1 kHz
Signal to noise ratio	
PHONO (MM) .....	87 dB (IHF '66)
	79 dB (IHF '78)
PHONO (MC) .....	68 dB (IHF '66)
	74 dB (IHF '78)
TUNER/AUX/TAPE1, 2/CD .....	104 dB (IHF '66)
	80 dB (IHF '78)

#### Note:

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be change without notice.

### Input sensitivity/impedance

PHONO (MM) .....	2.5 mV/47 k $\Omega$
PHONO (MC) .....	0.2 mV/100 $\Omega$
TUNER/AUX/TAPE1, 2/CD .....	200 mV/47 k $\Omega$
ADAPTOR IN .....	200 mV/47 k $\Omega$

### Tone control

BASS .....	$\pm 10$ dB (at 100 Hz)
TREBLE .....	$\pm 10$ dB (at 10 kHz)

### Filter

SUBSONIC filter .....	18 Hz, -12 dB/oct
-----------------------	-------------------

### Loudness control

(VOLUME at -30 dB level) .....	+6 dB (100 Hz)
	+3 dB (10 kHz)

### Output level/impedance

TAPE REC .....	200 mV/300 $\Omega$
ADAPTOR OUT .....	200 mV/300 $\Omega$

### General

Power consumption .....	270 W
-------------------------	-------

### AC outlet

For Australia	
SWITCHED .....	1; (200 W max.)

### For other countries

SWITCHED .....	3; (Total 200 W max.)
----------------	-----------------------

Dimensions .....	W: 440 mm
------------------	-----------

H: 147 mm

D: 403 mm

Weight (net) .....	12 kg
--------------------	-------

## KENWOOD CORPORATION

Alive Mitake, 2-5, 1-chome Shibuya, Shibuya-ku, Tokyo 150, Japan

### KENWOOD U.S.A. CORPORATION

P.O. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90810 U.S.A.  
550 Clark Drive, Mount Olive, New Jersey 07828, U.S.A.  
99-994 Iwaena St. Aiea, Hawaii 96701

### KENWOOD ELECTRONICS CANADA INC.

6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

### KENWOOD ELECTRONICS LATIN AMERICA S.A.

P.O. BOX 55-2791, Piso 6 Plaza Chase, Cl. 47 y Aquilino de la Guardia, Panama, Republic de Panama

### TRIO-KENWOOD U.K. LIMITED

KENWOOD House, Dwight Road, Watford, Herts, WD1 8EB United Kingdom

### KENWOOD ELECTRONICS BENELUX N.V.

Mechelsesteenweg 418 B-1930 Zaventem, Belgium

### KENWOOD ELECTRONICS DEUTSCHLAND GMBH

Rembrücker Str. 15, 6056 Heusenstamm, Germany

### TRIO-KENWOOD FRANCE S.A.

13 Boulevard Ney, 75018 Paris, France

### KENWOOD LINEAR S.p.A.

20125, Milano-Via Arbe, 50, Italy

### KENWOOD ESPAÑA S.A.

Bolivia, 239-08020 Barcelona, Spain

### KENWOOD ELECTRONICS AUSTRALIA PTY. LTD. (A.C.N. 001 499 074)

P.O. BOX 504, 8 Figtree Drive, Australia Centre, Homebush, N.S.W. 2140, Australia

### KENWOOD & LEE ELECTRONICS, LTD.

Unit 3712-3724, Level 37 Tower 1, Metroplaza, 223 Hing Fong Road, Kwai Fong N.T. Hong Kong

### KENWOOD ELECTRONICS SINGAPORE PTE LTD

No. 1 Genting Lane # 07-00, Singapore, 1334

Kenwood follows a policy of continuous advancements in development.  
For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement.  
Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an.  
Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.